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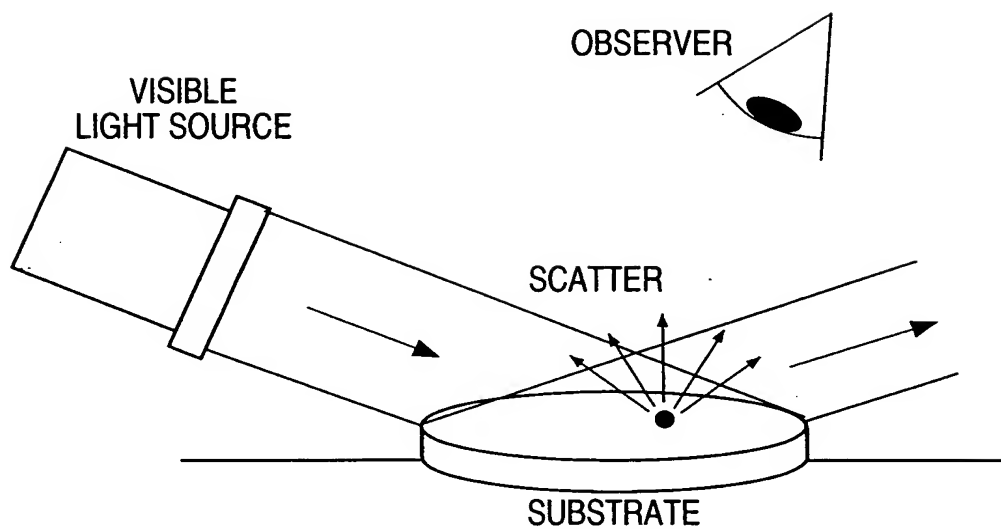


FIG. 1

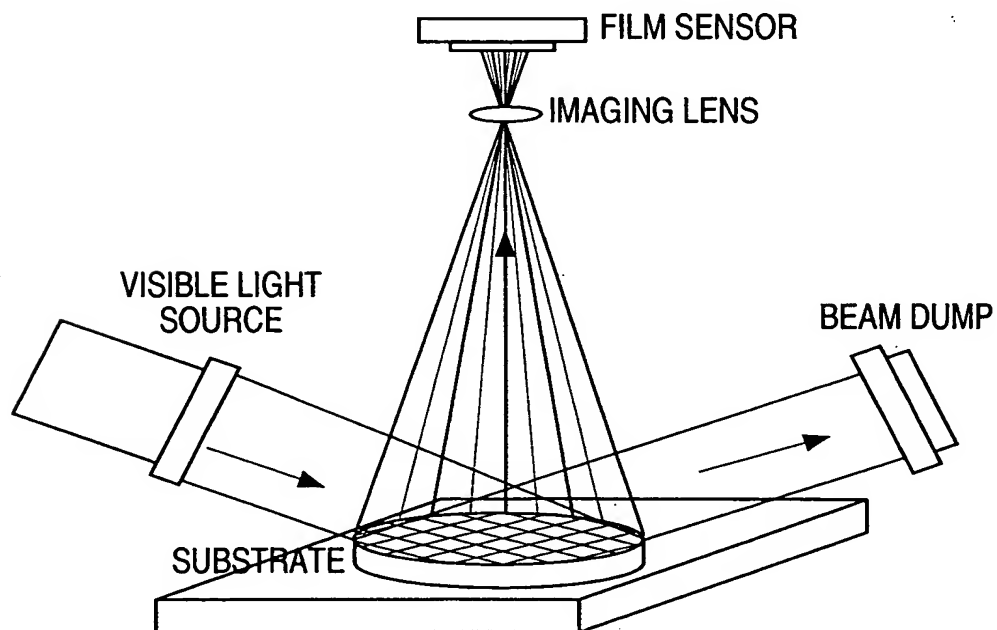


FIG. 2

X,Y, θ
STAGE

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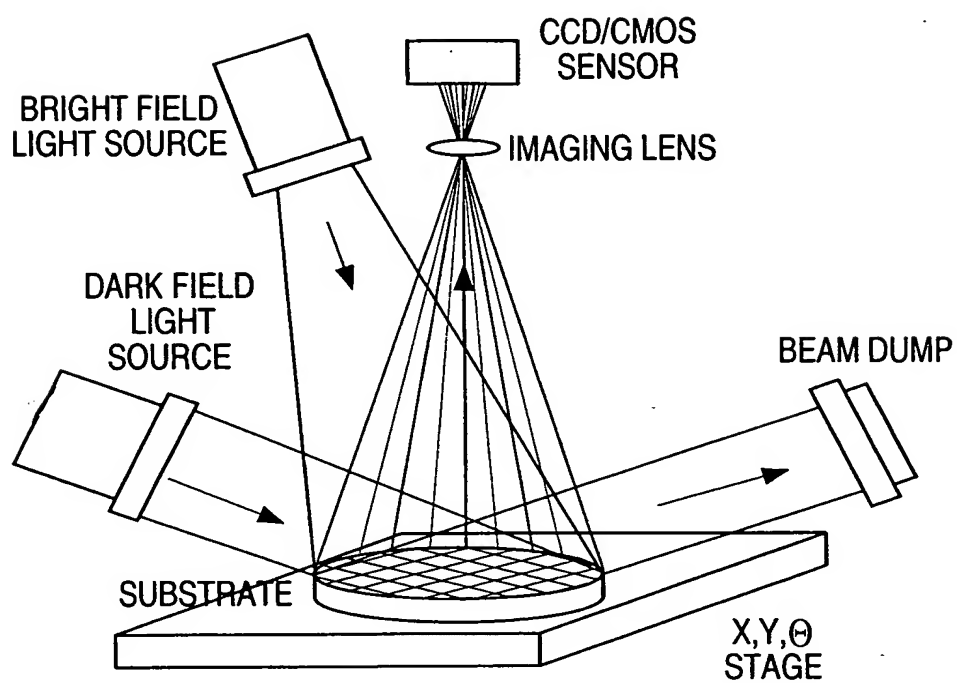


FIG. 3

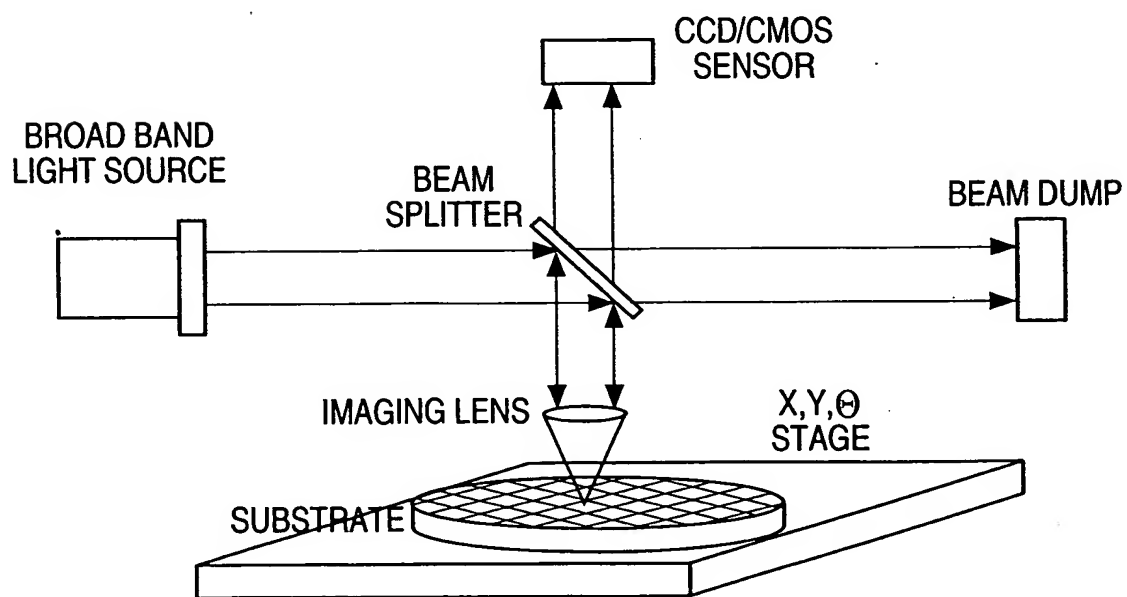


FIG. 3A

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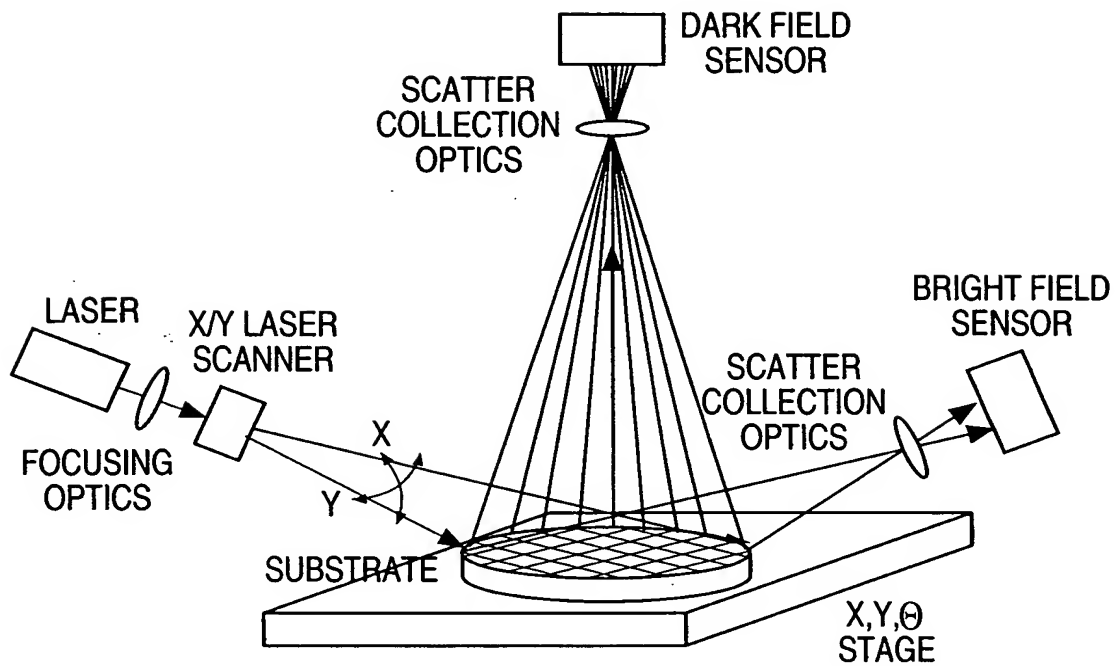


FIG. 3B

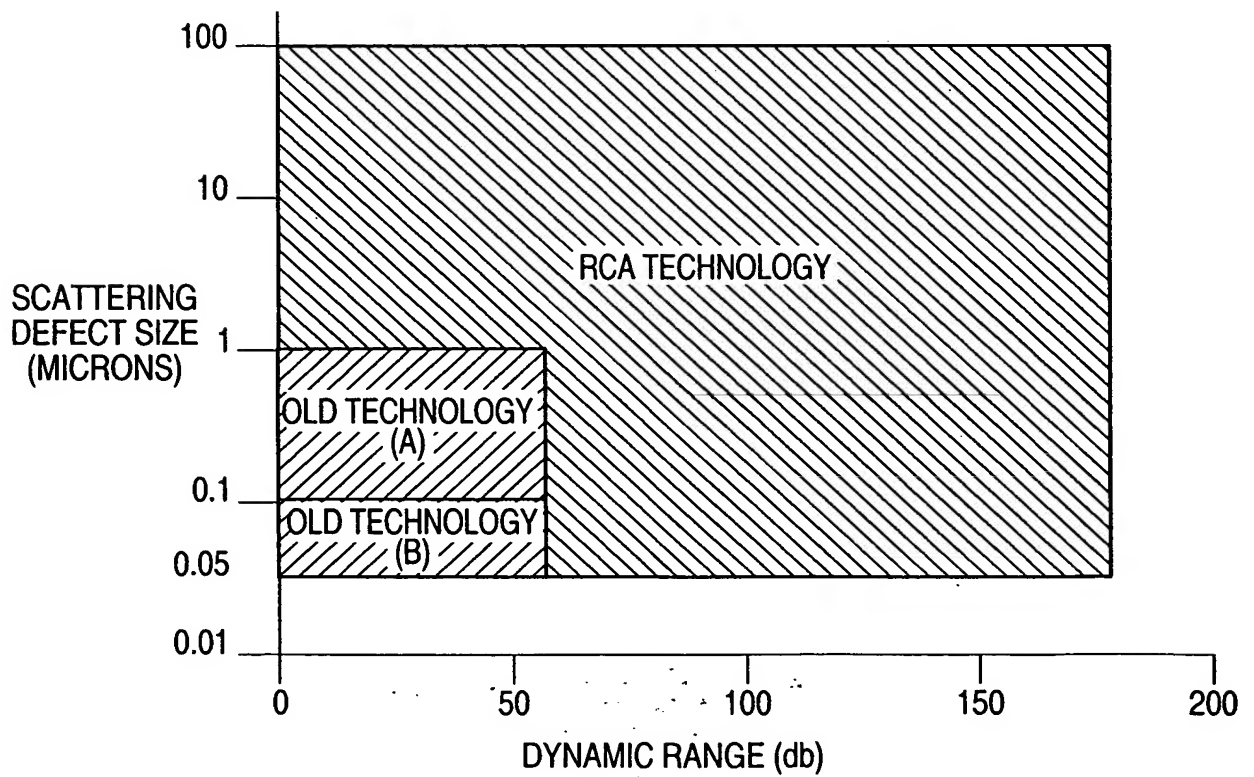


FIG. 4A

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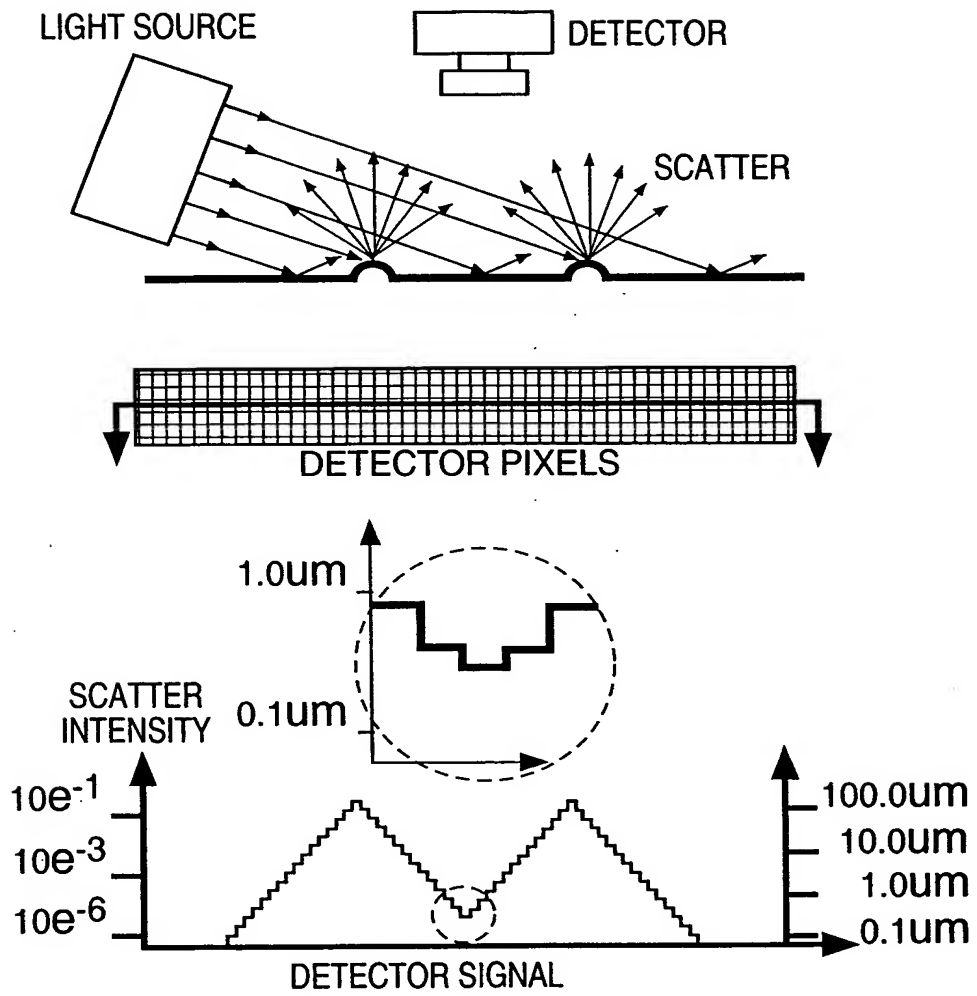


FIG. 4B

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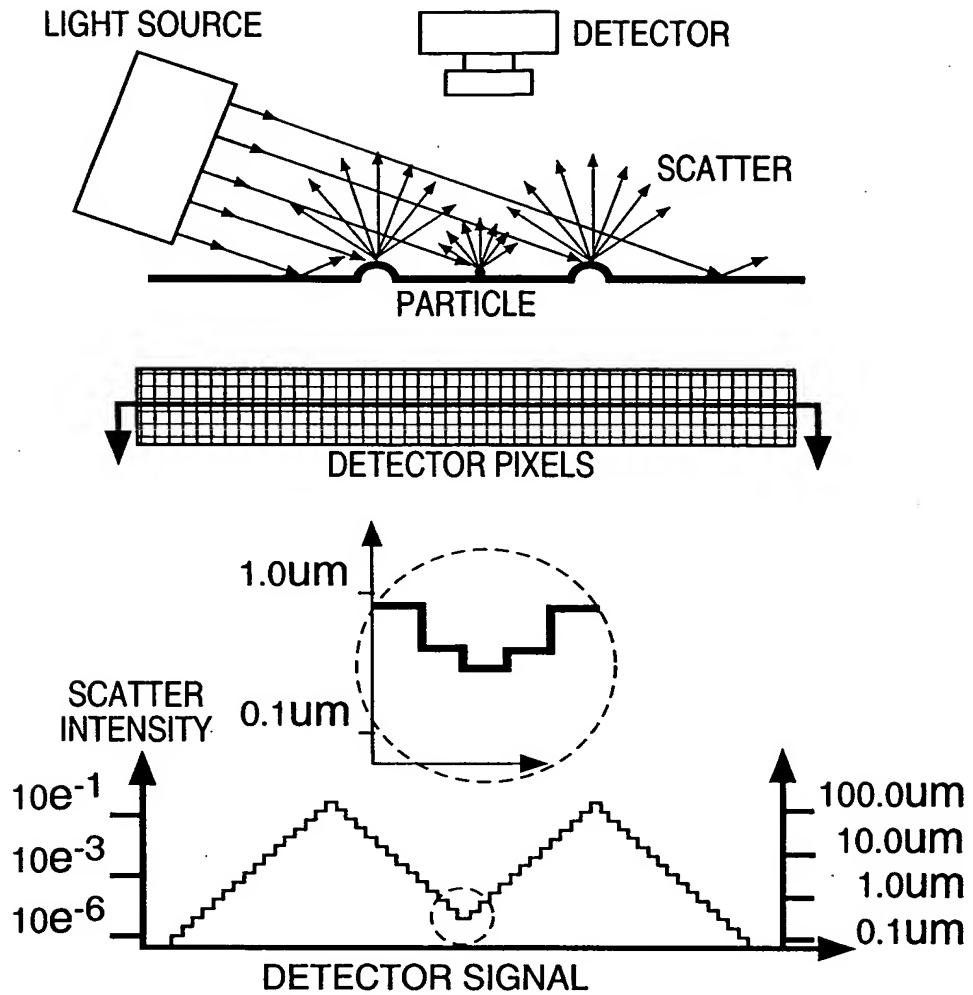


FIG. 4C

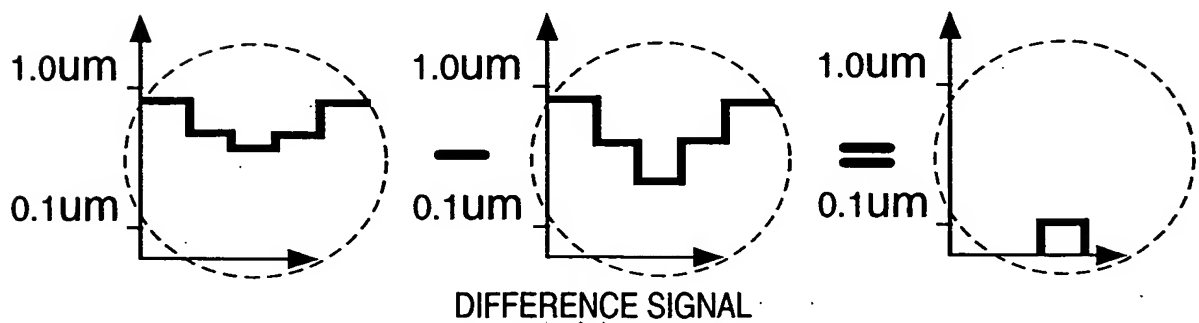


FIG. 4D

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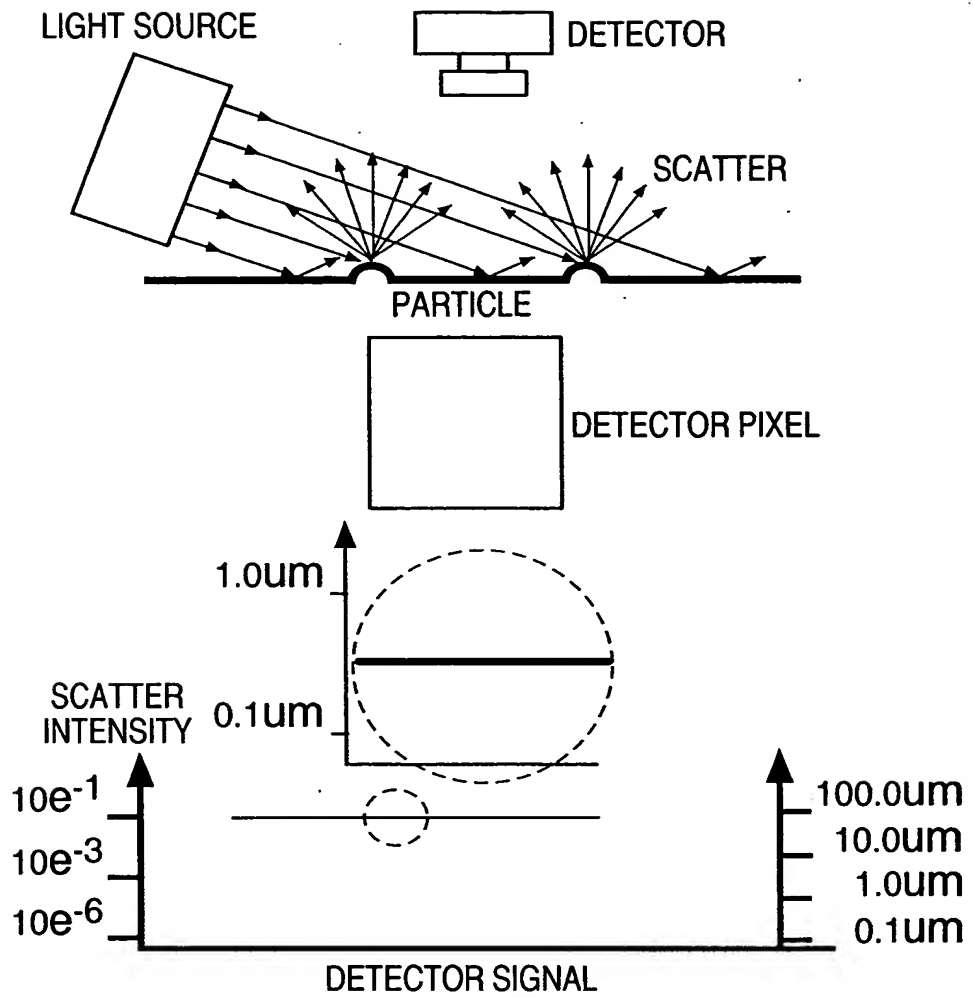


FIG. 4E

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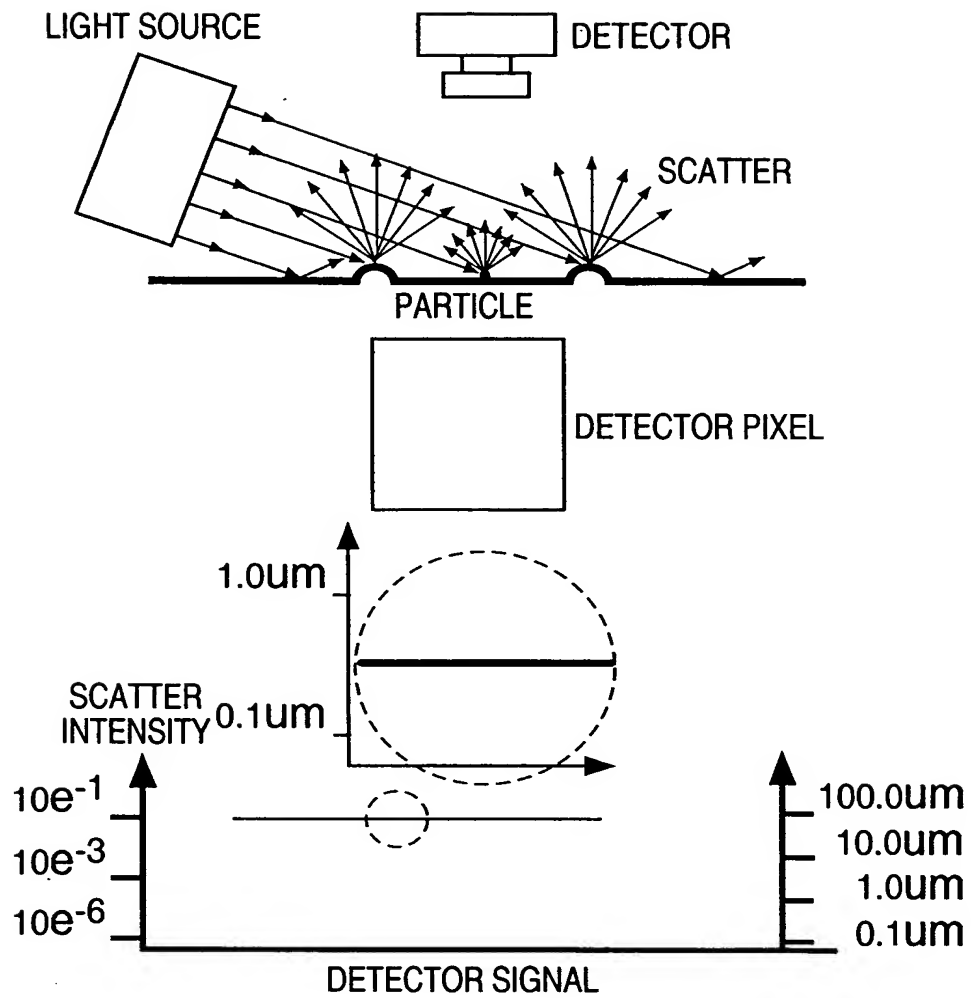


FIG. 4F

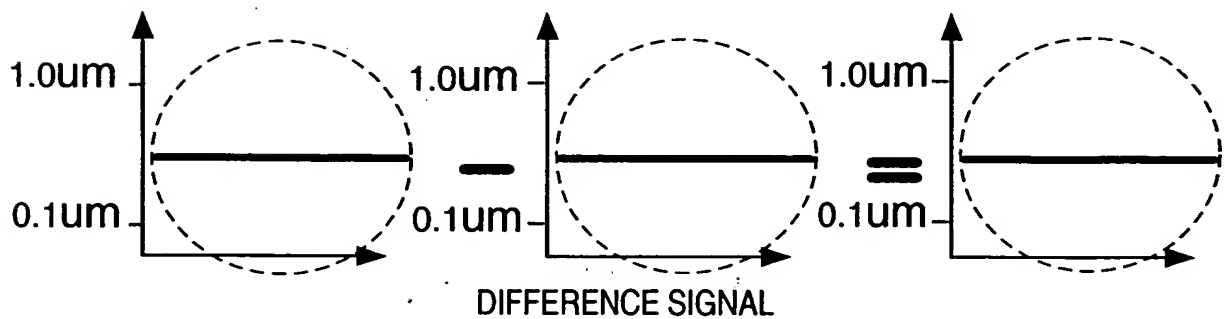
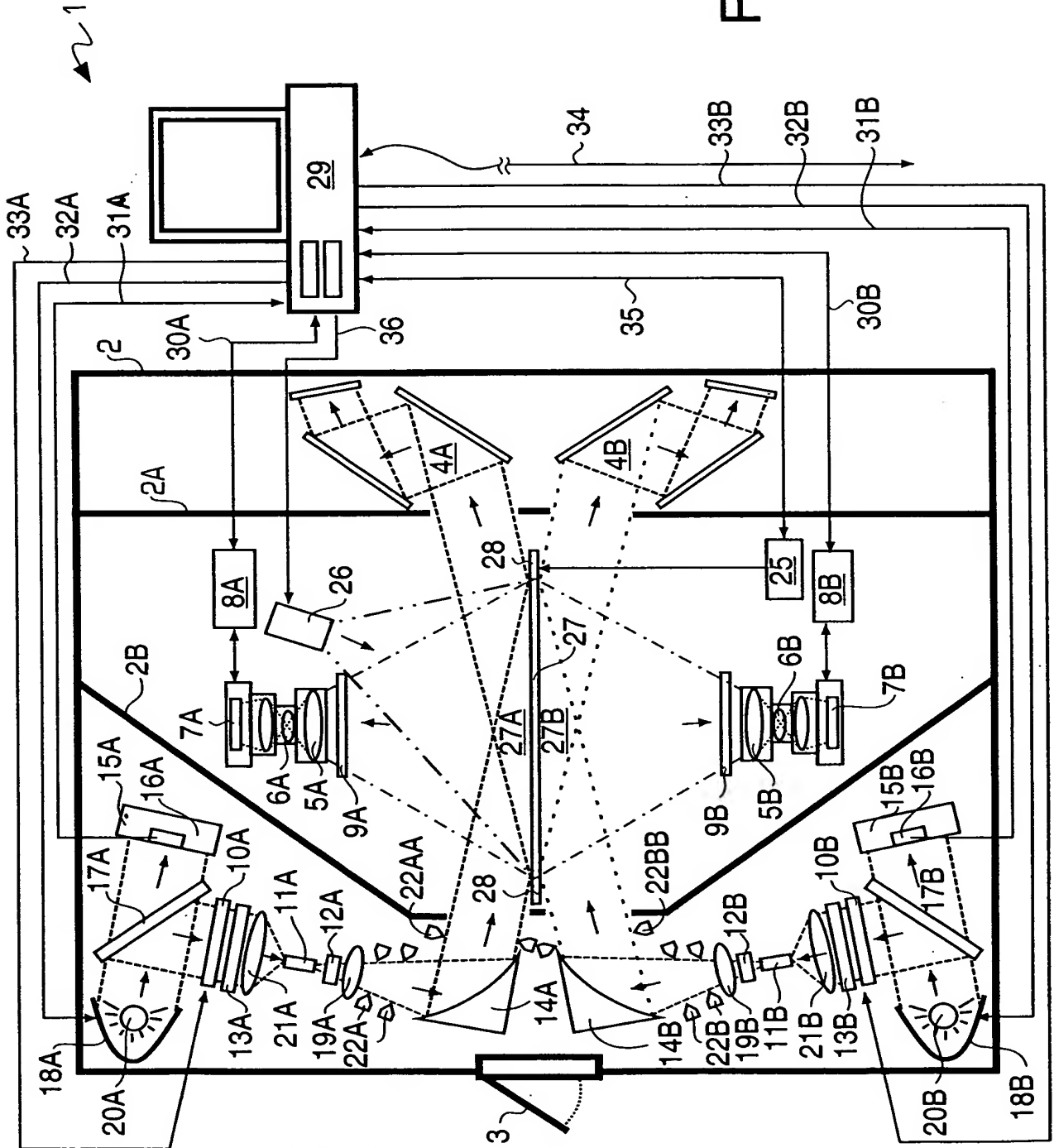


FIG. 4G

FIG. 5



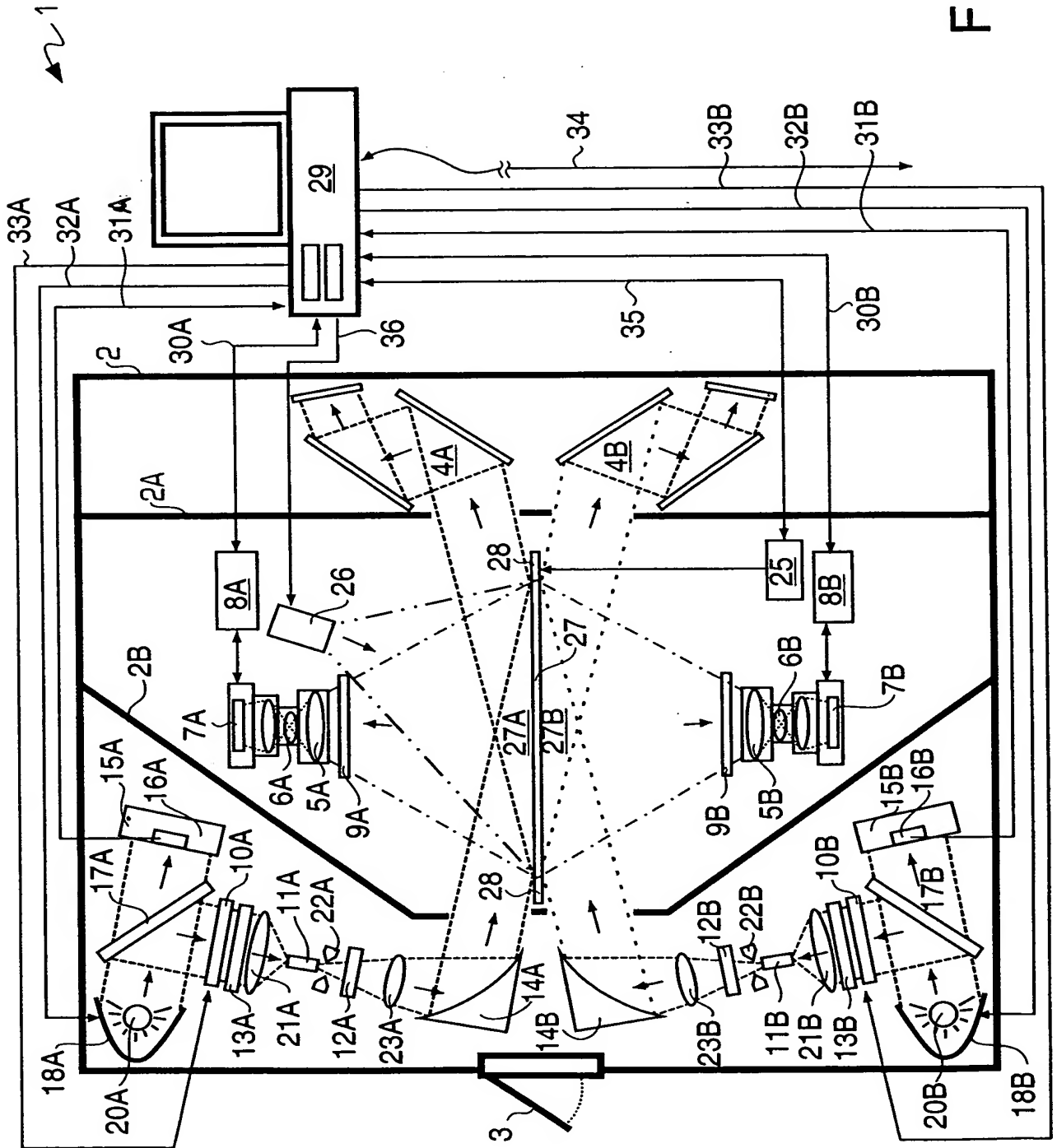


FIG. 5A

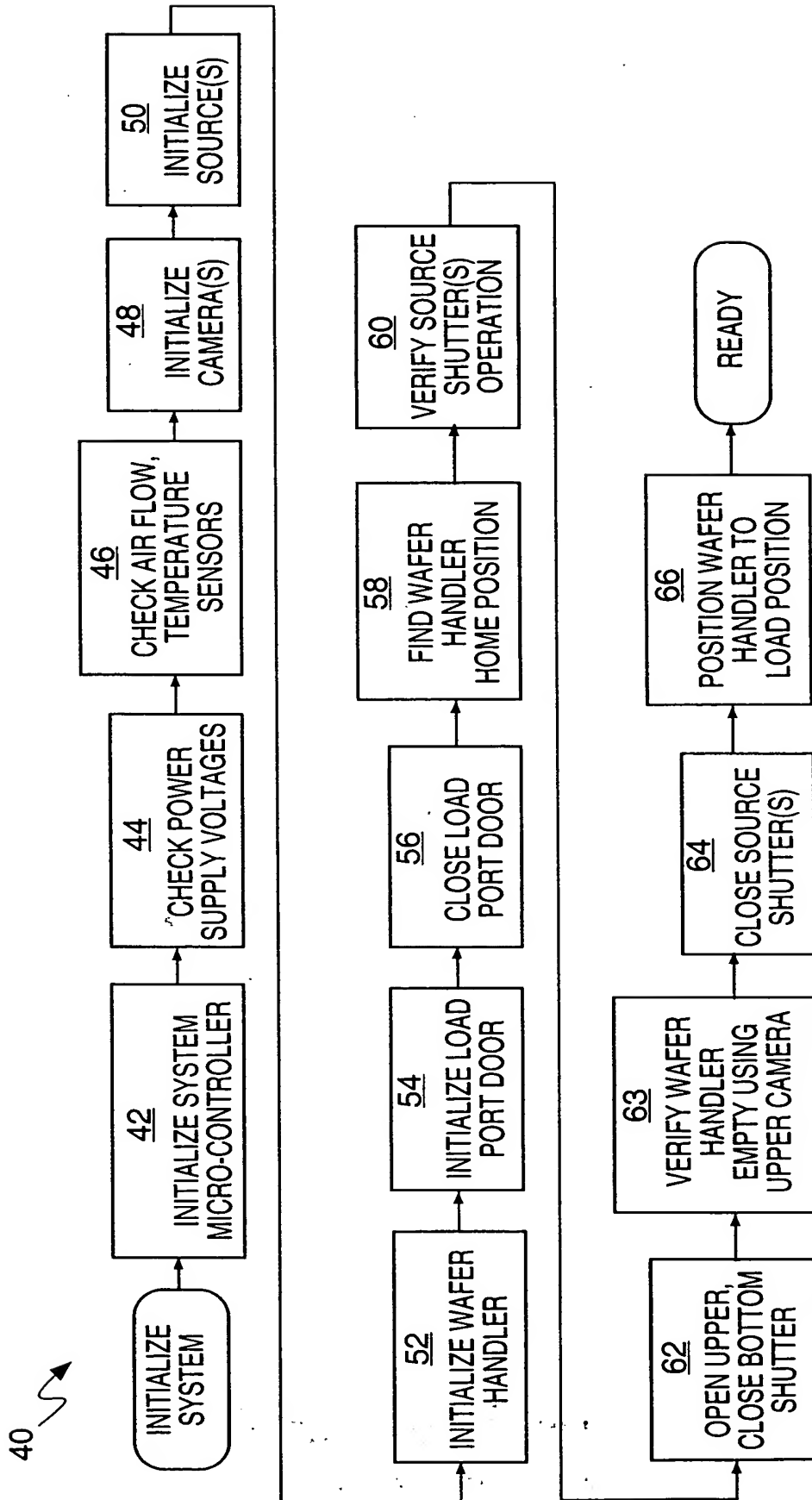
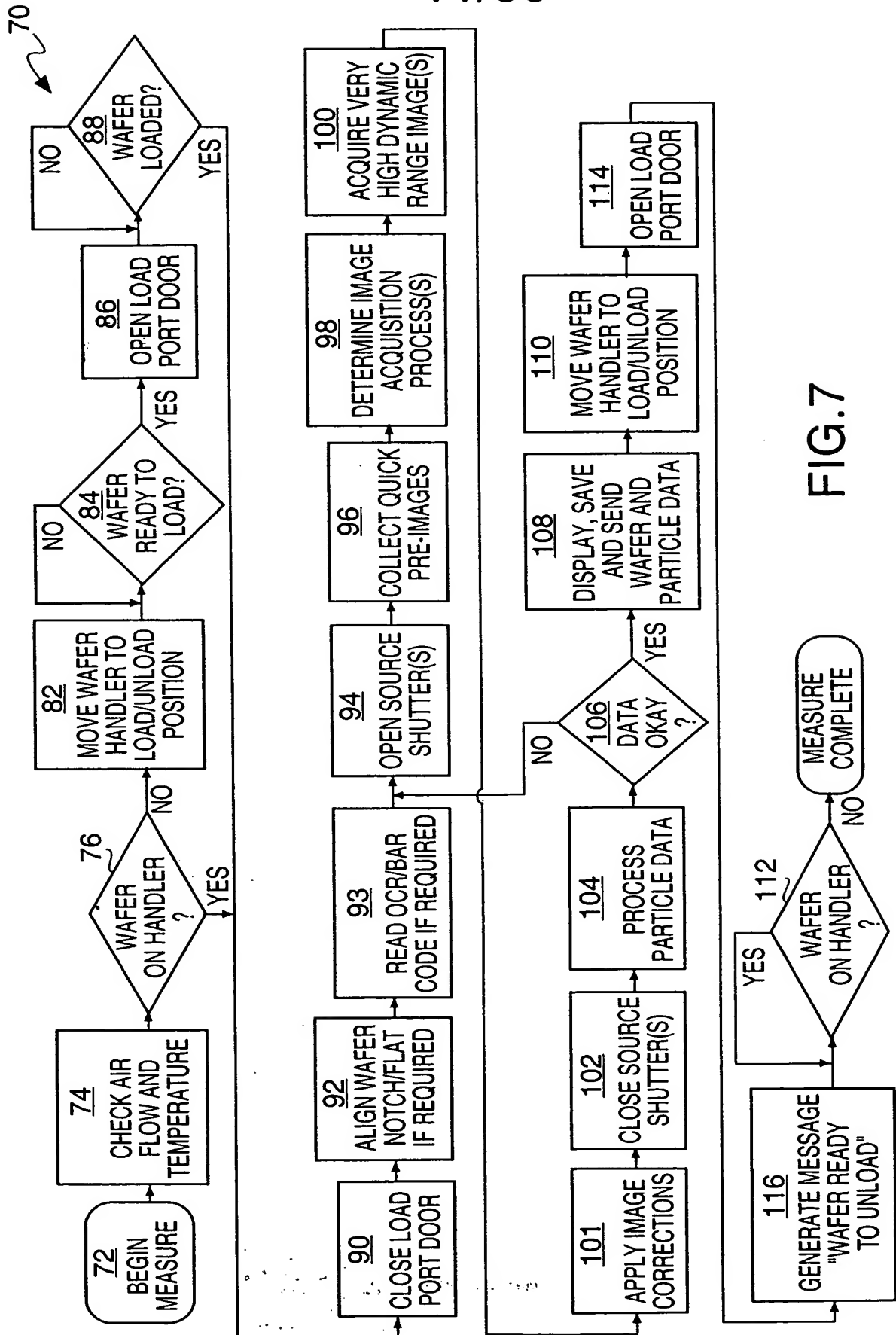


FIG. 6



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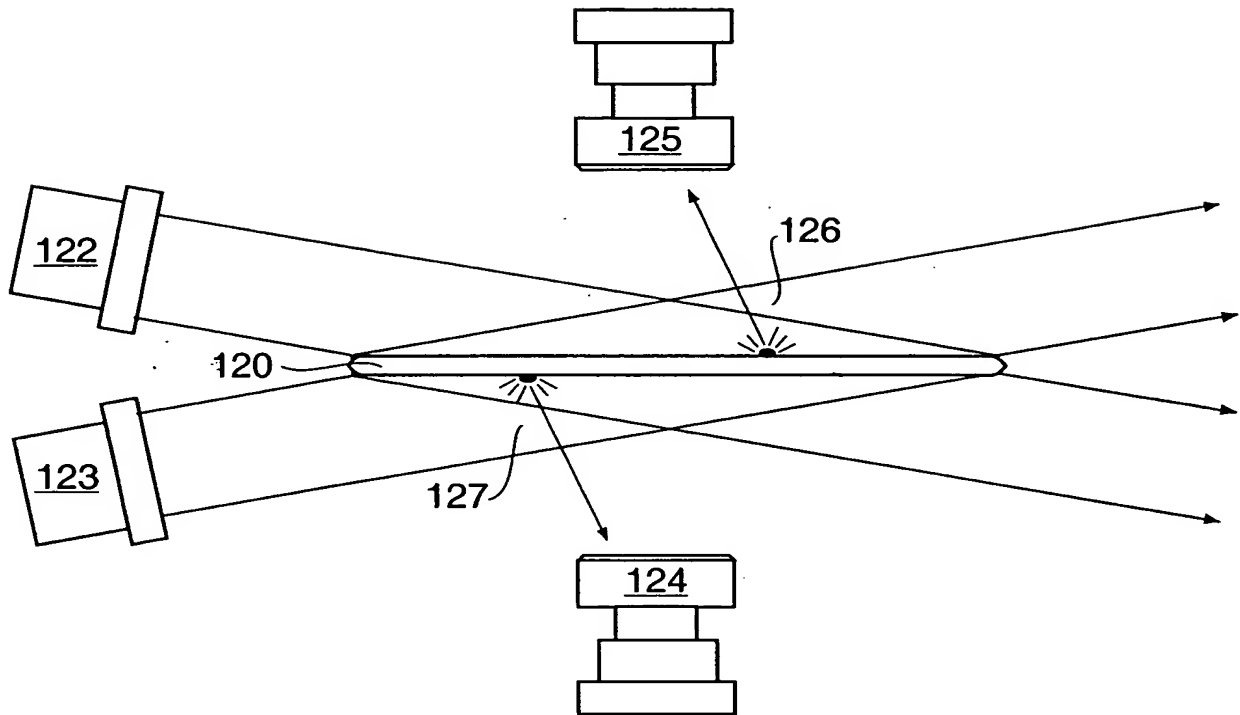


FIG. 8

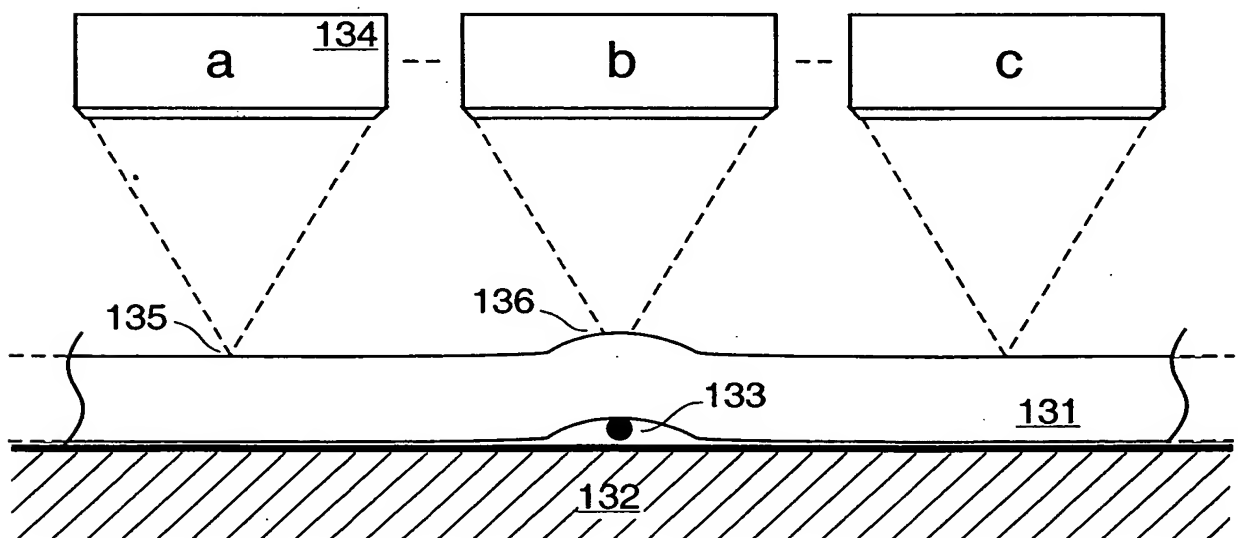


FIG. 9

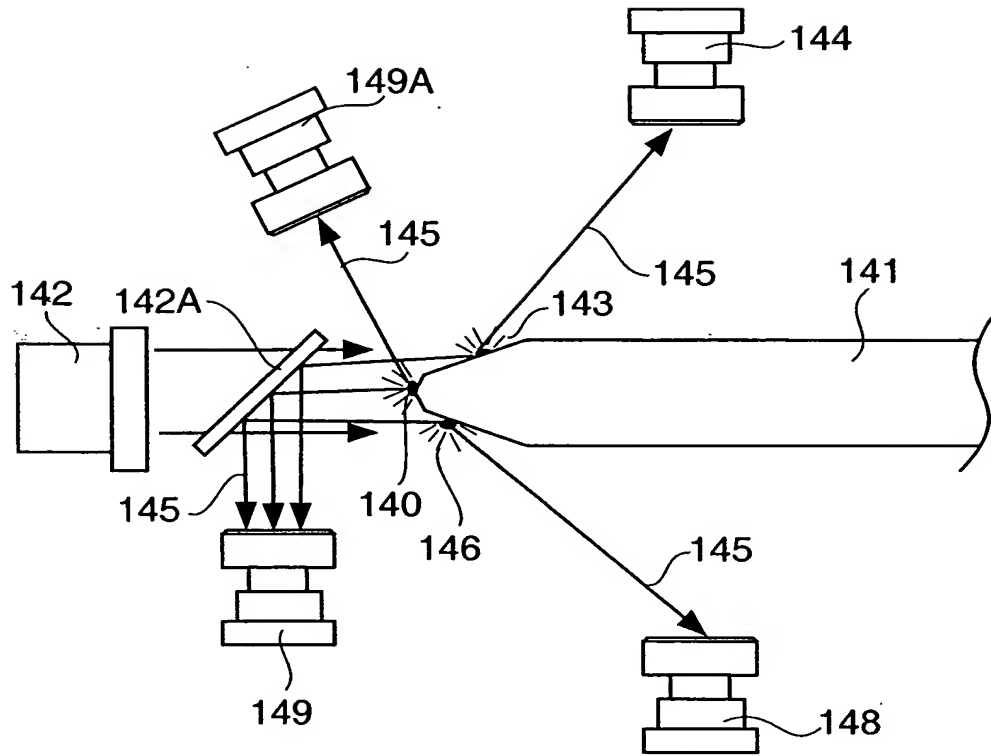


FIG. 10

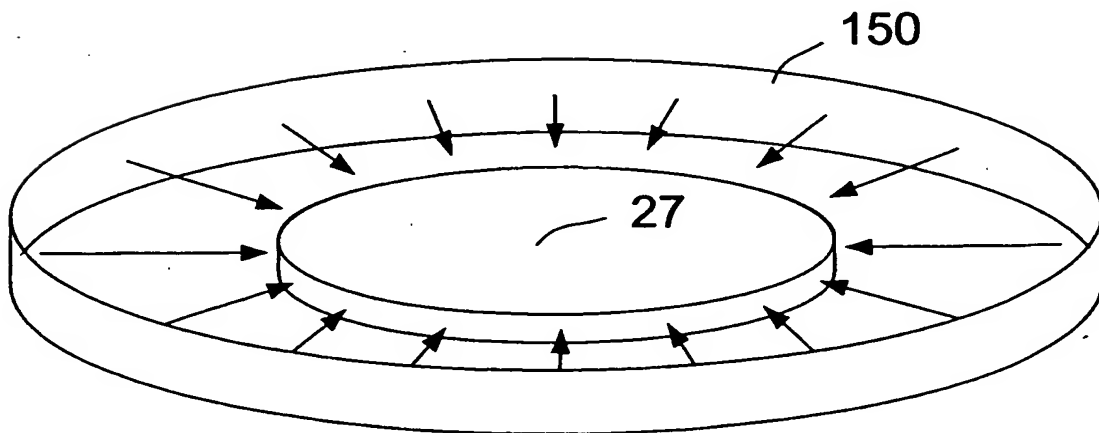


FIG. 11

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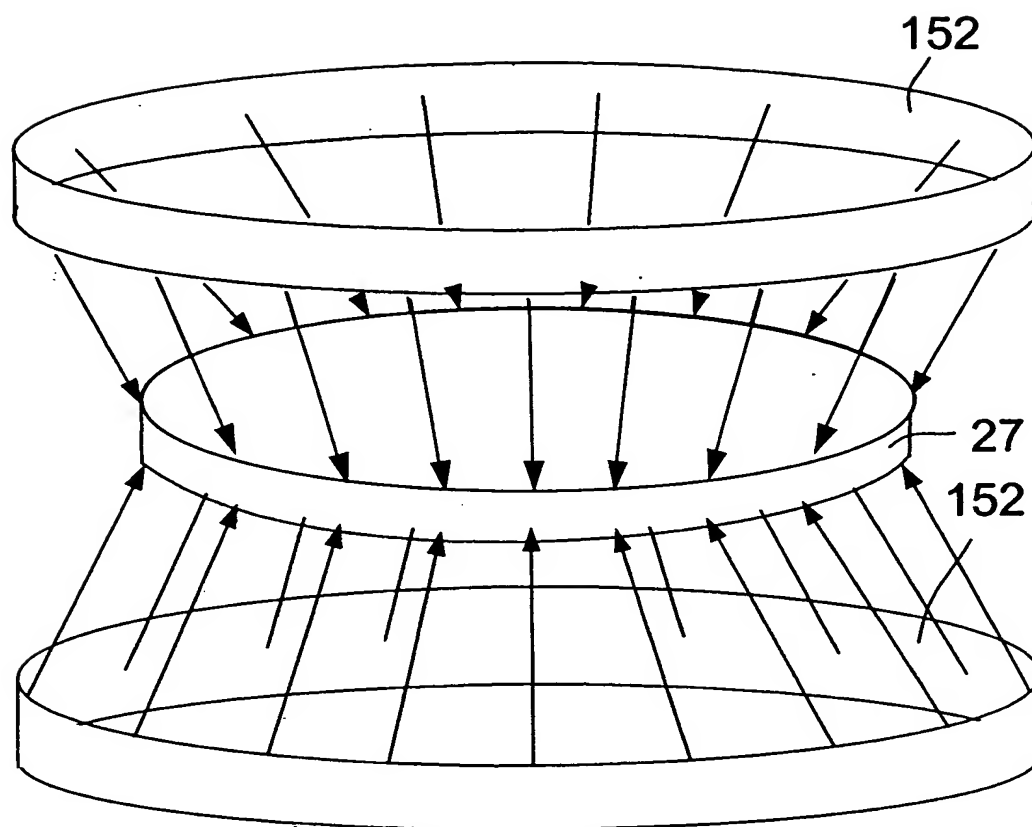


FIG. 12

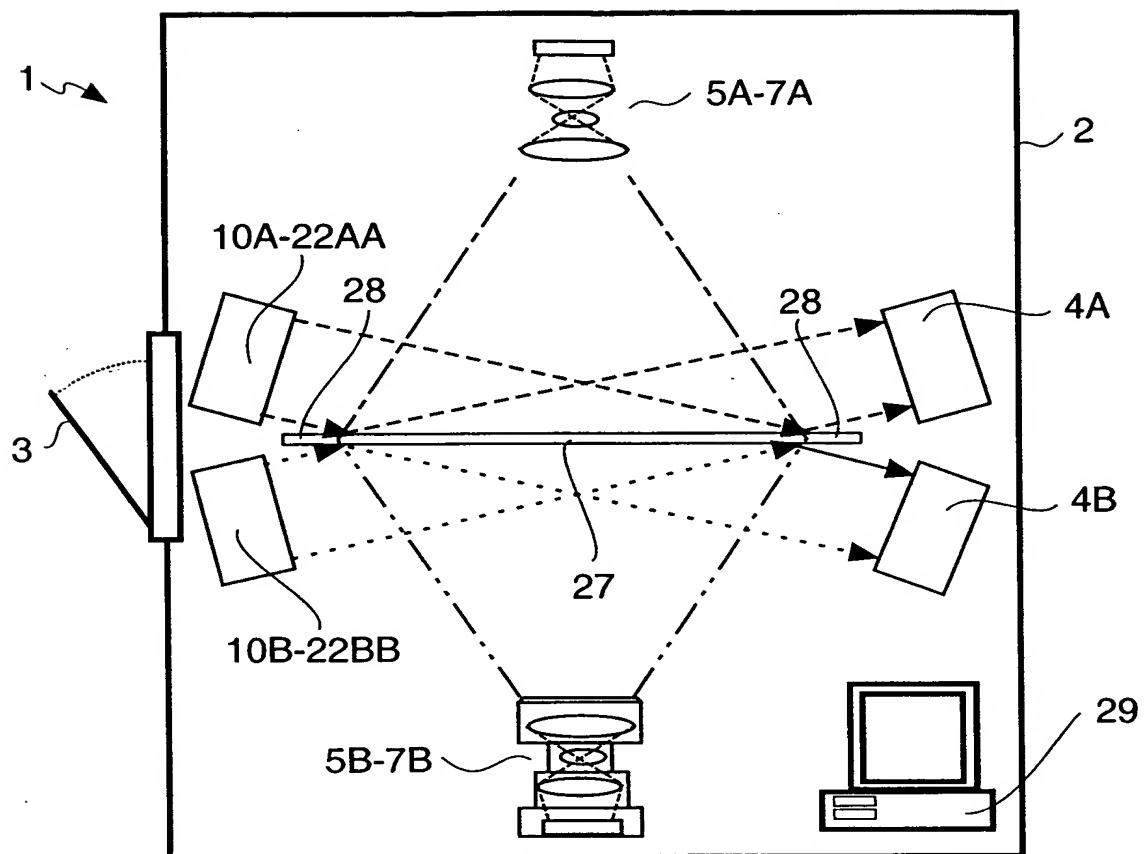


FIG. 13A

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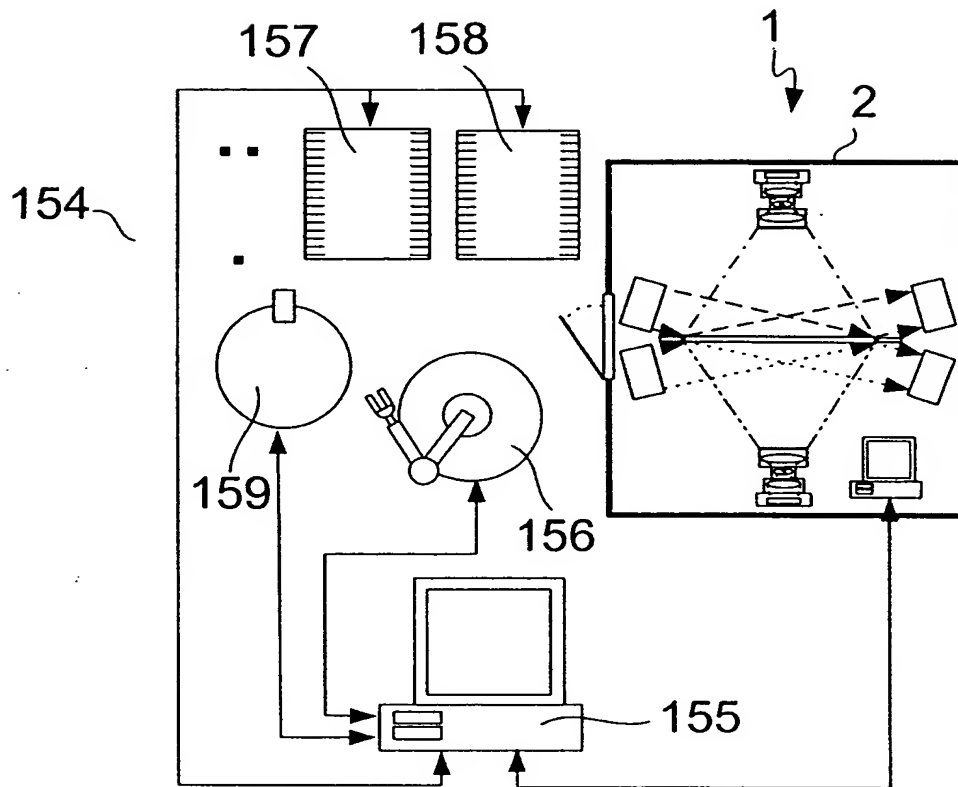


FIG. 13B

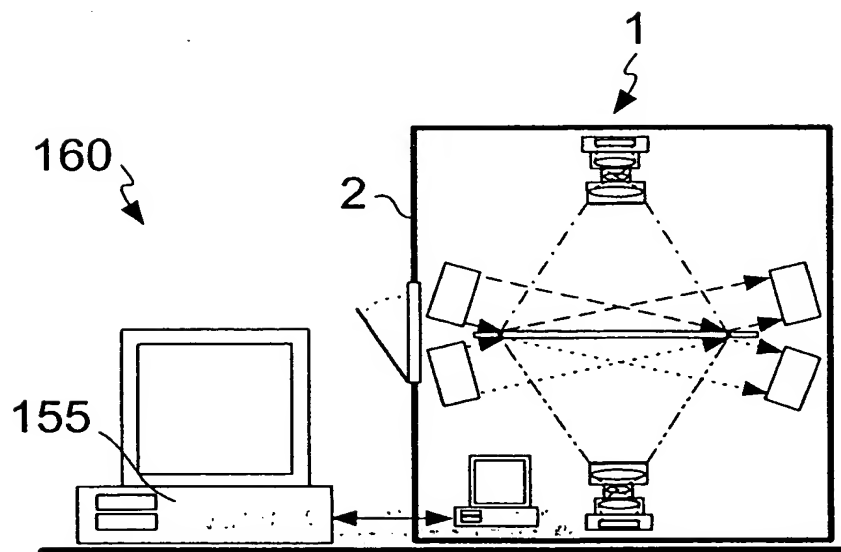


FIG. 13C

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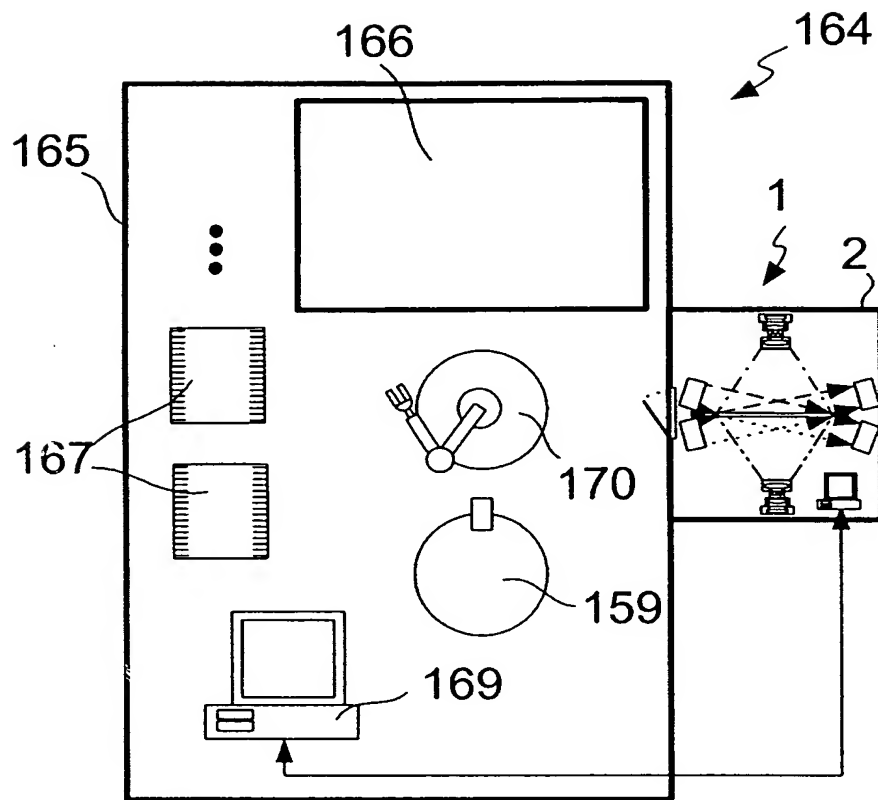


FIG. 13D

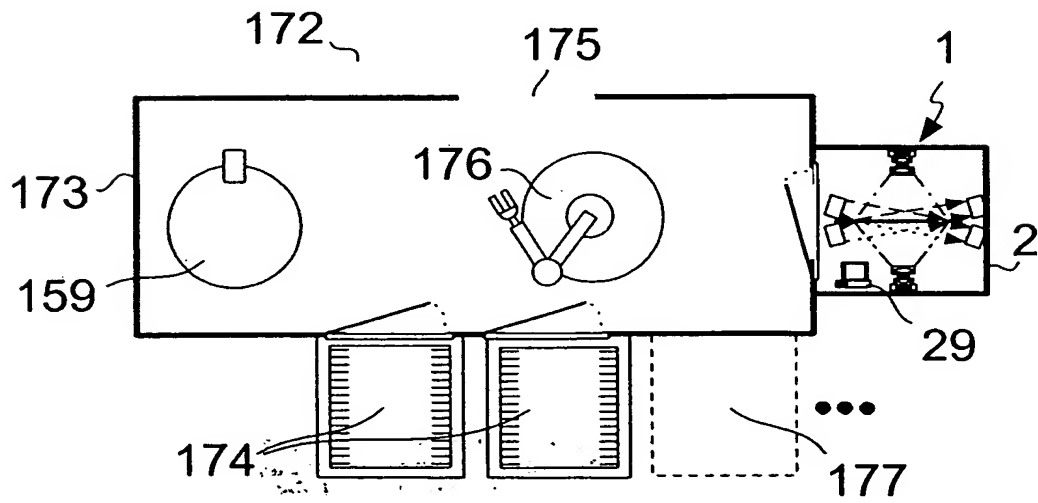


FIG. 13E

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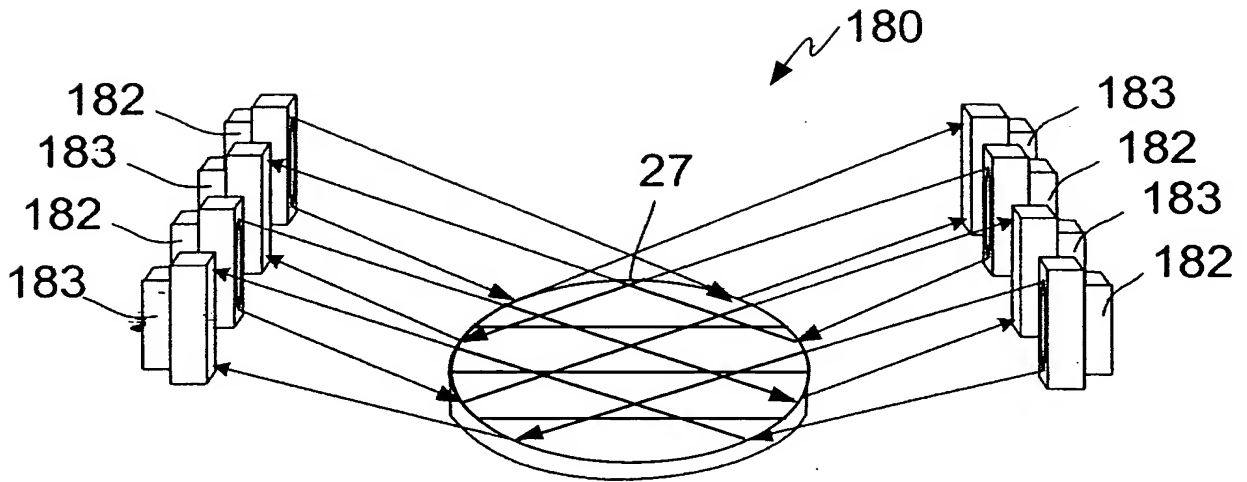


FIG. 14

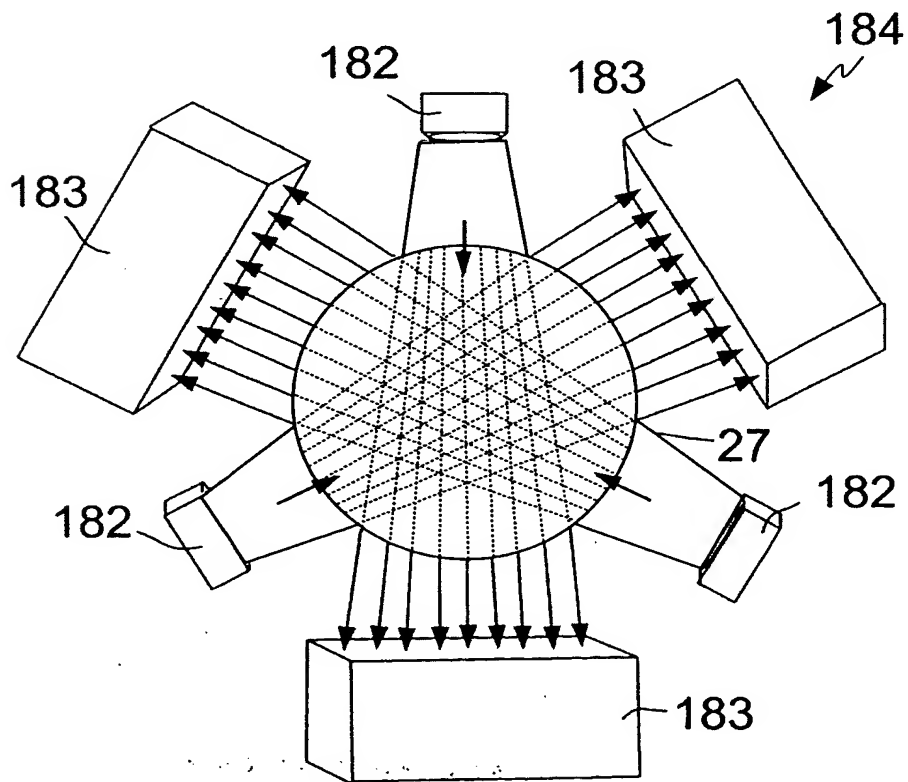


FIG. 15

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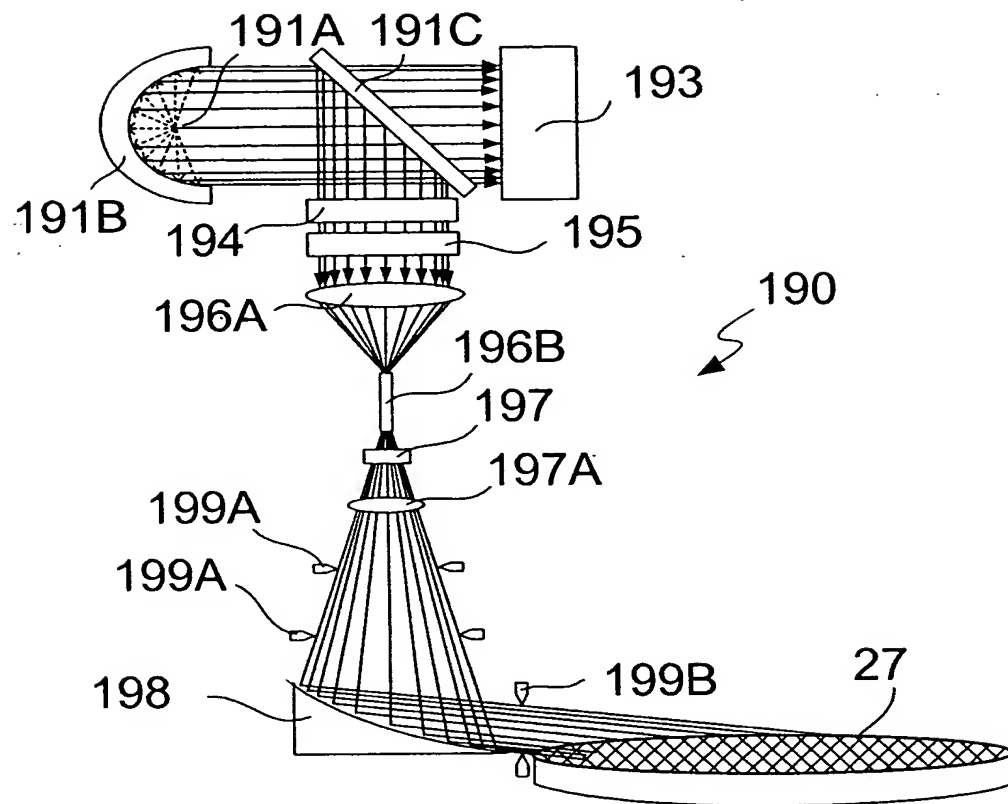


FIG. 16

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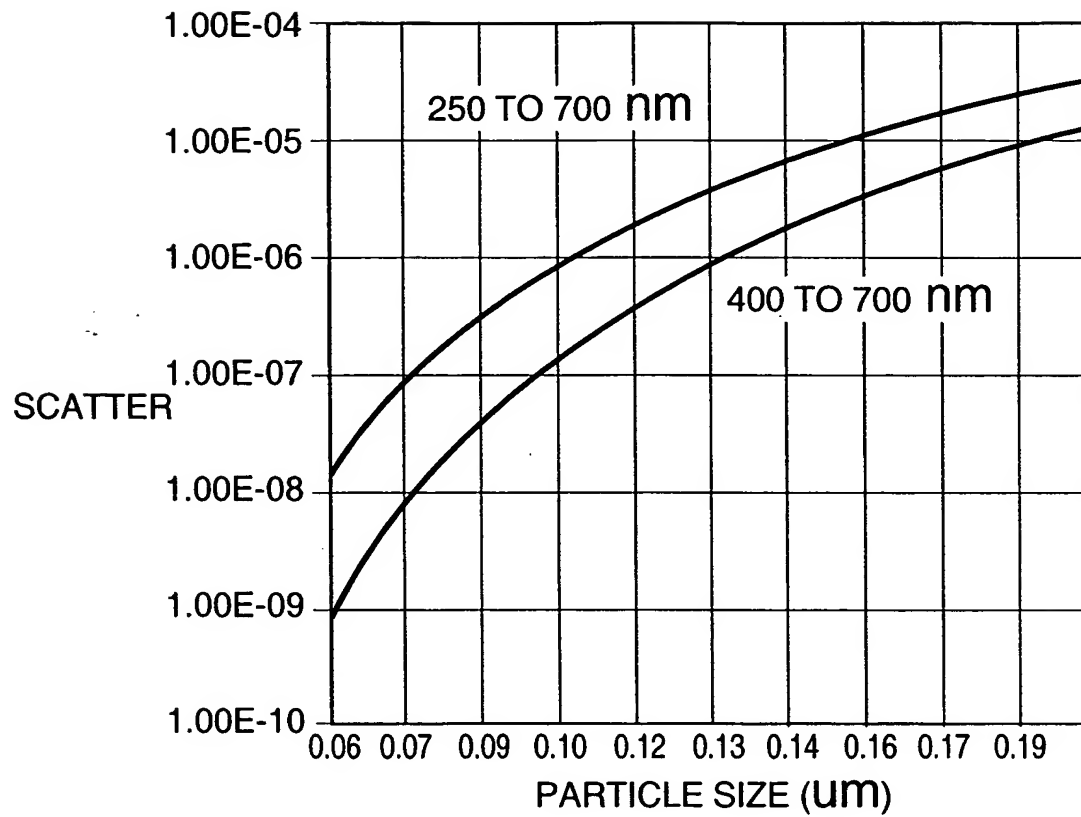


FIG. 16A

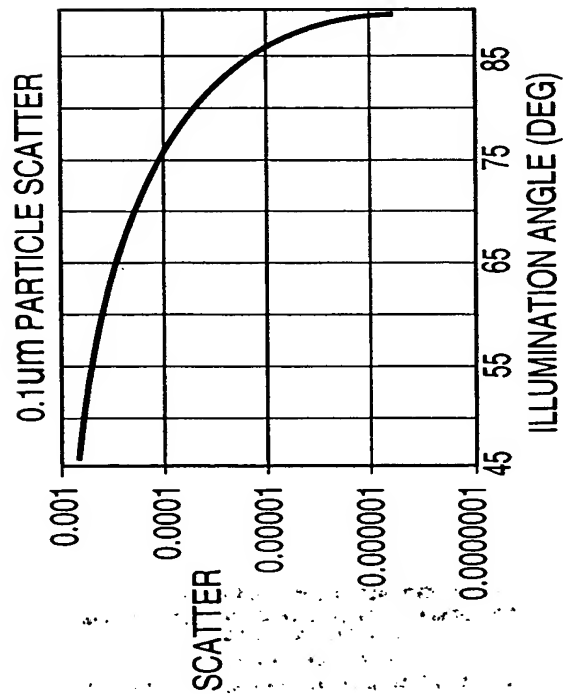
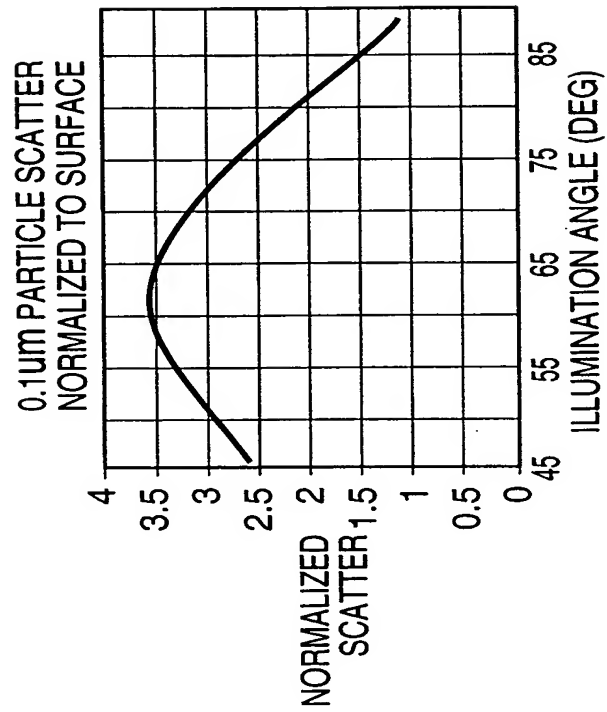


FIG. 16B

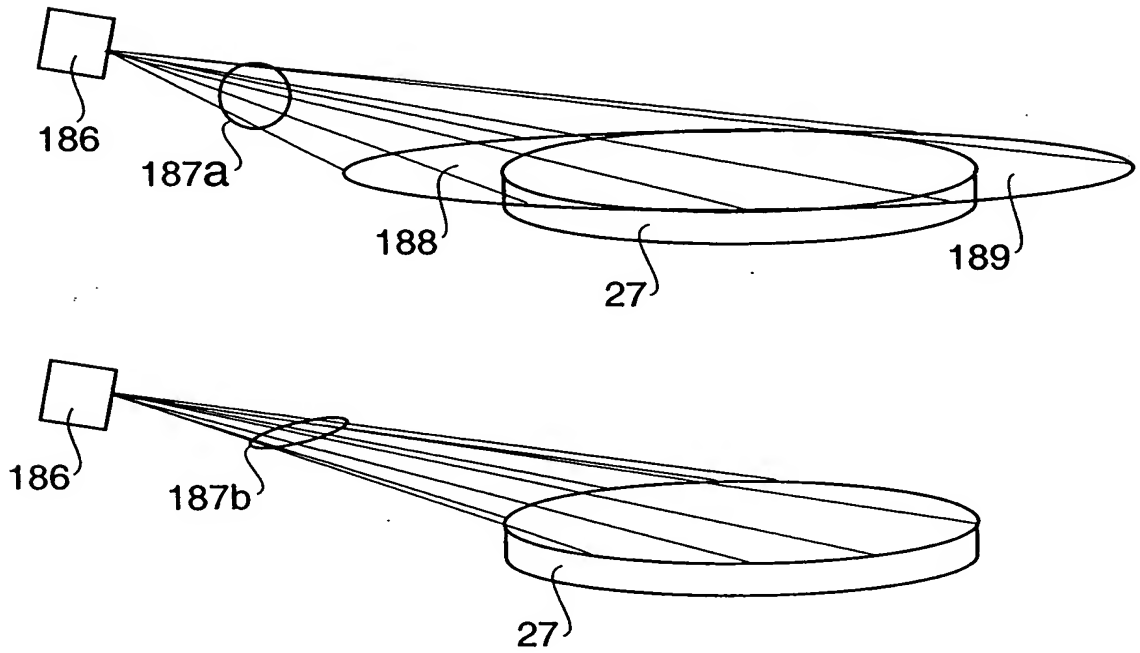


FIG. 16C

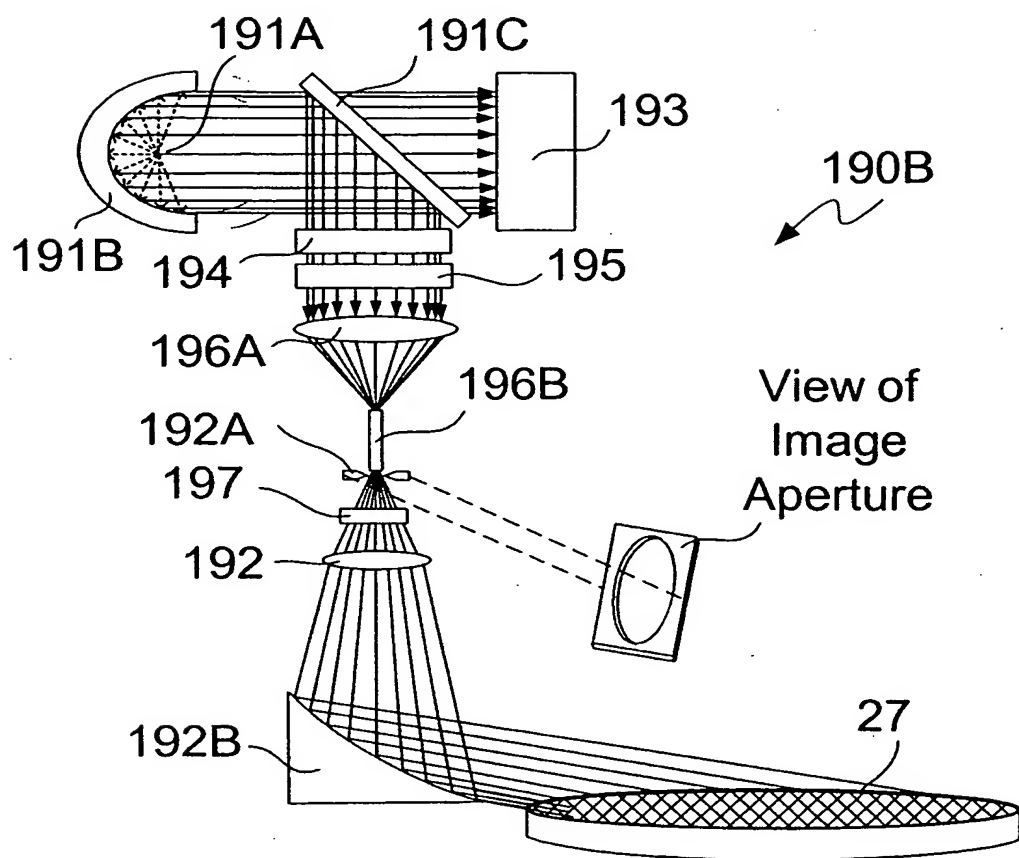


FIG. 17

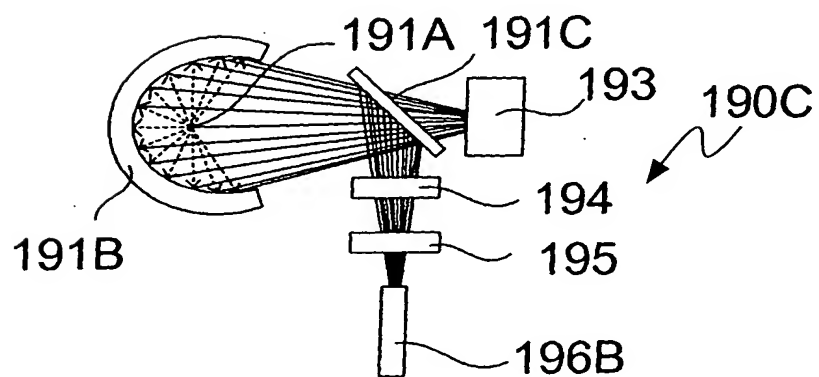


FIG. 17A

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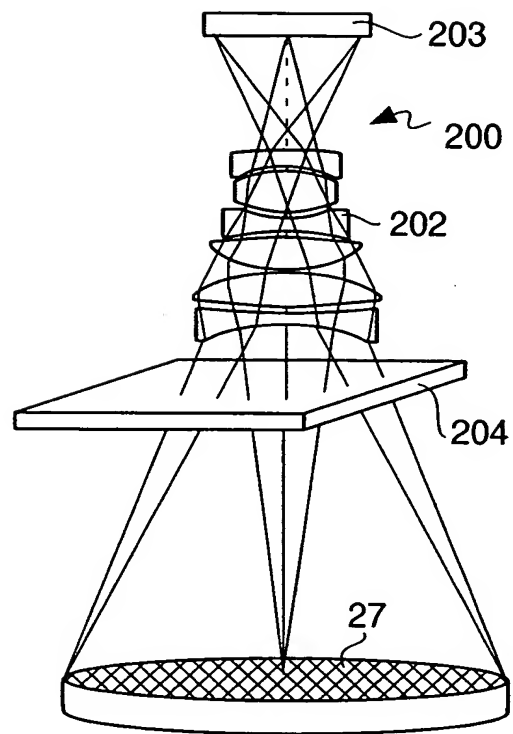


FIG. 18

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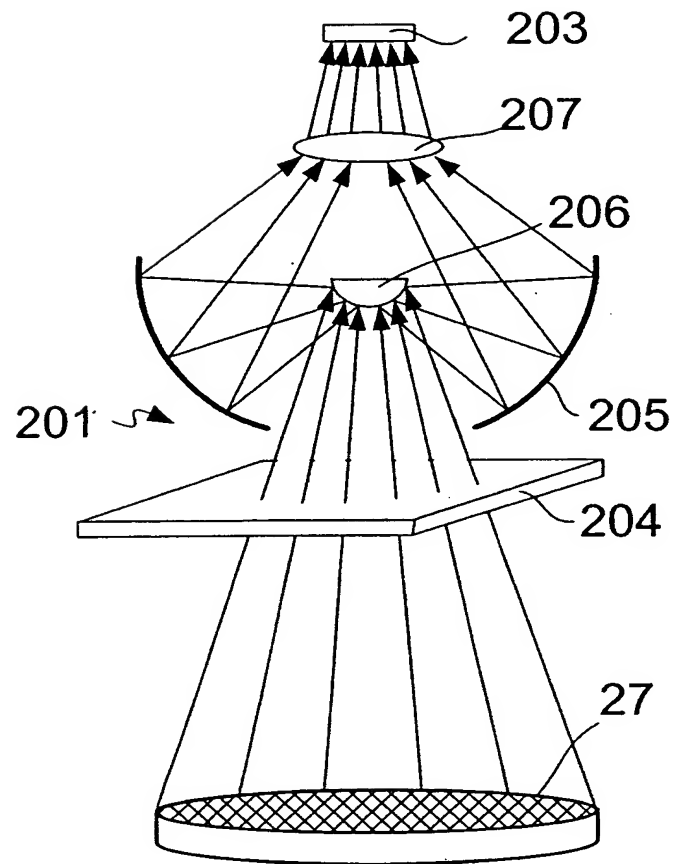


FIG. 19

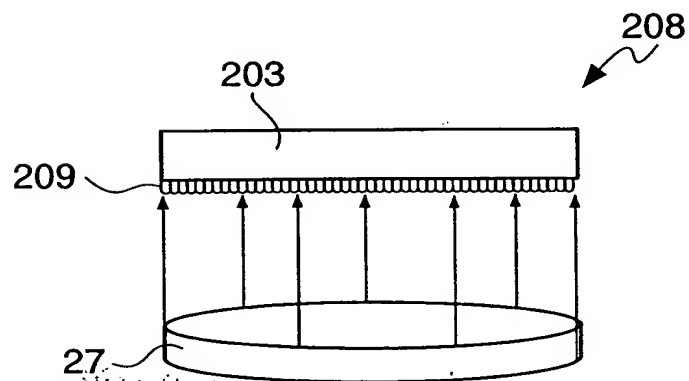


FIG. 20

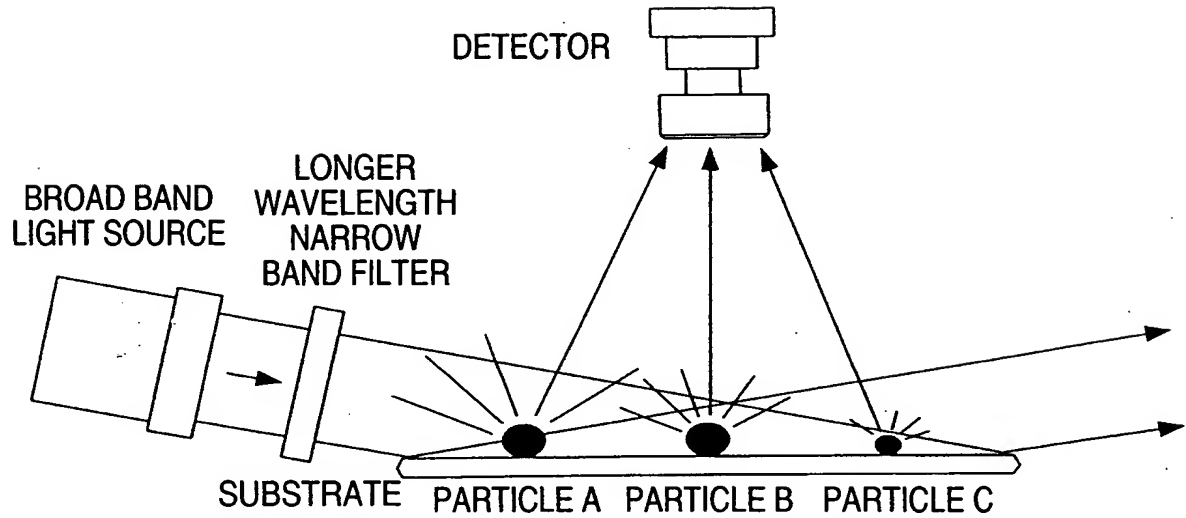


FIG. 21A

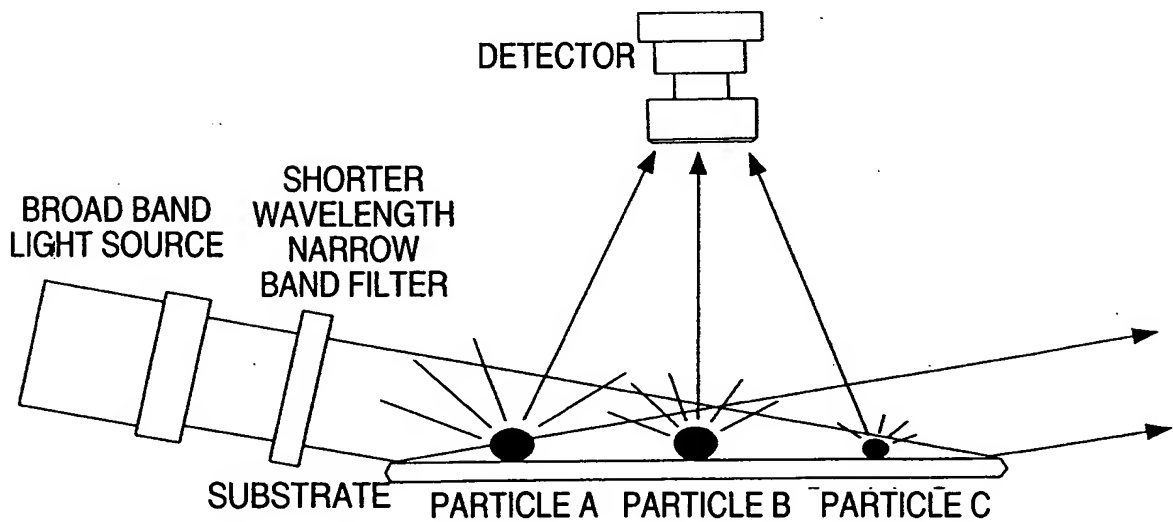
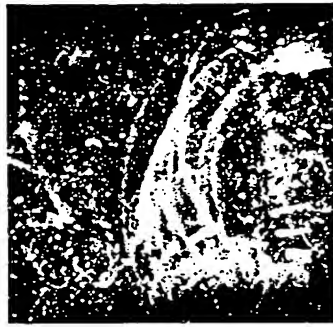


FIG. 21B

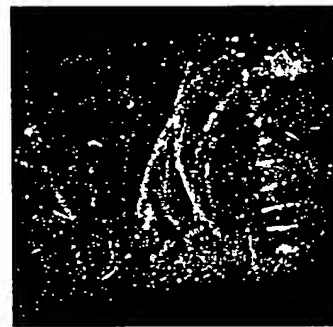
CID - WITH ANTI-BLOOMING



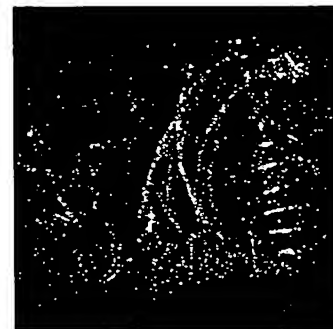
60.0 SEC



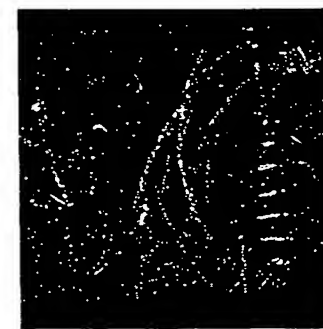
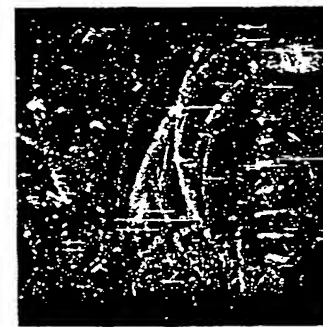
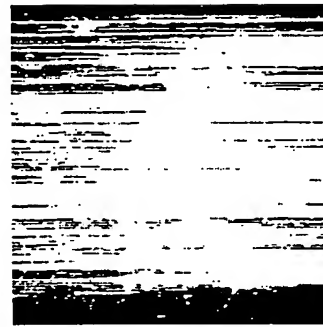
10.0 SEC



1.0 SEC



0.1 SEC



CCD - WITHOUT ANTI-BLOOMING

FIG. 22

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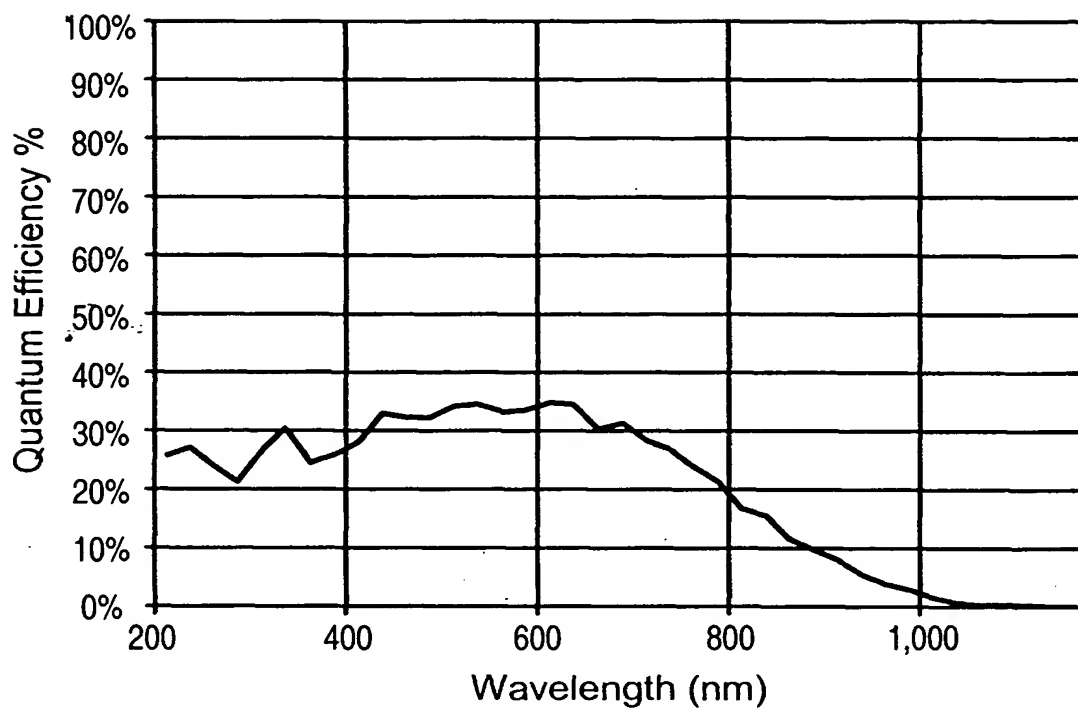


FIG. 22A

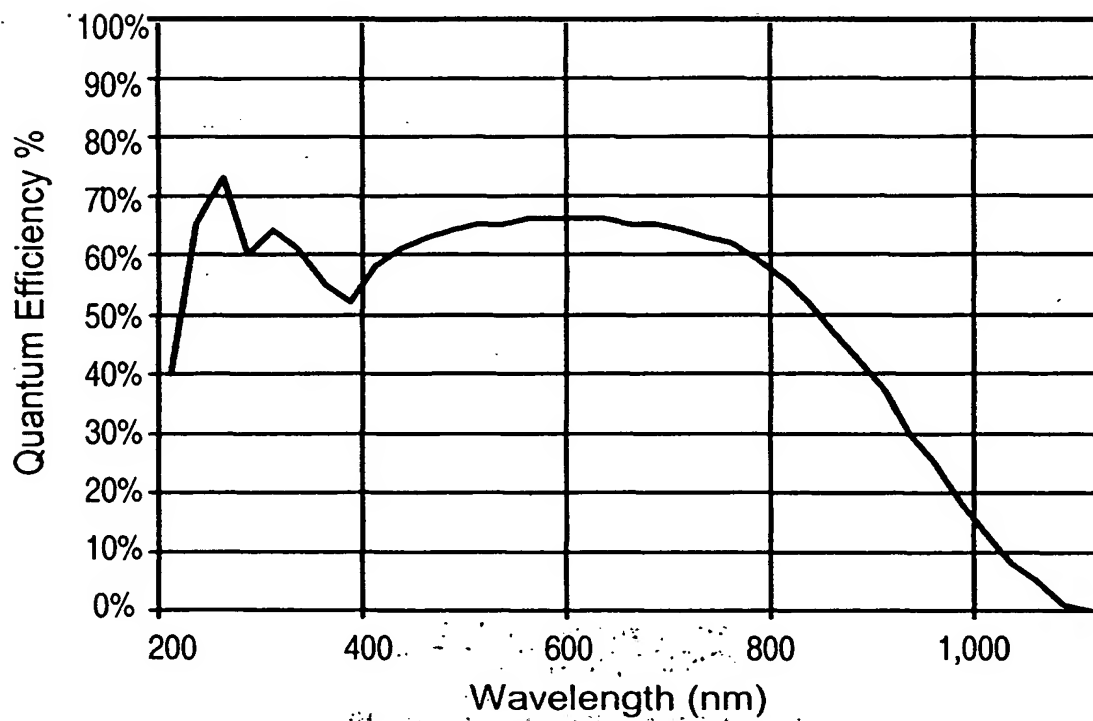


FIG. 22B

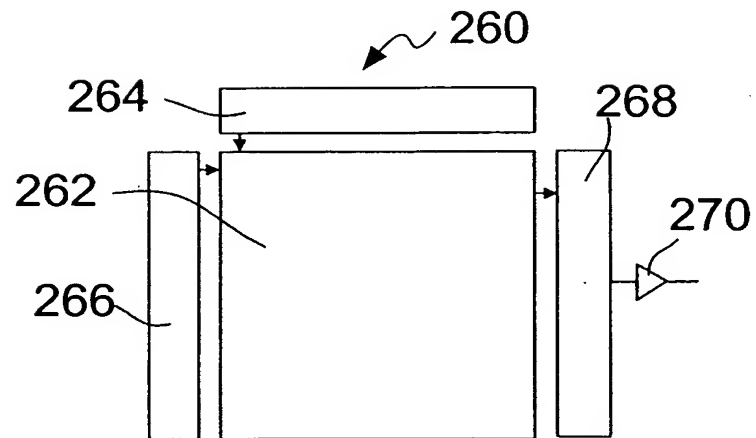


FIG. 23B1

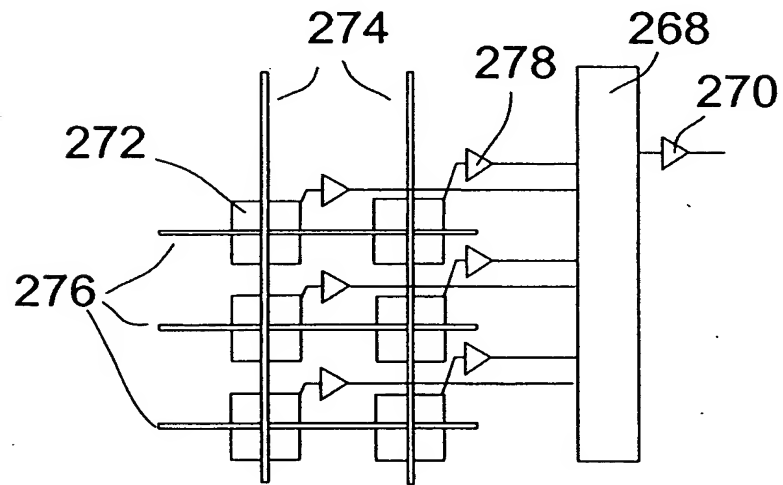
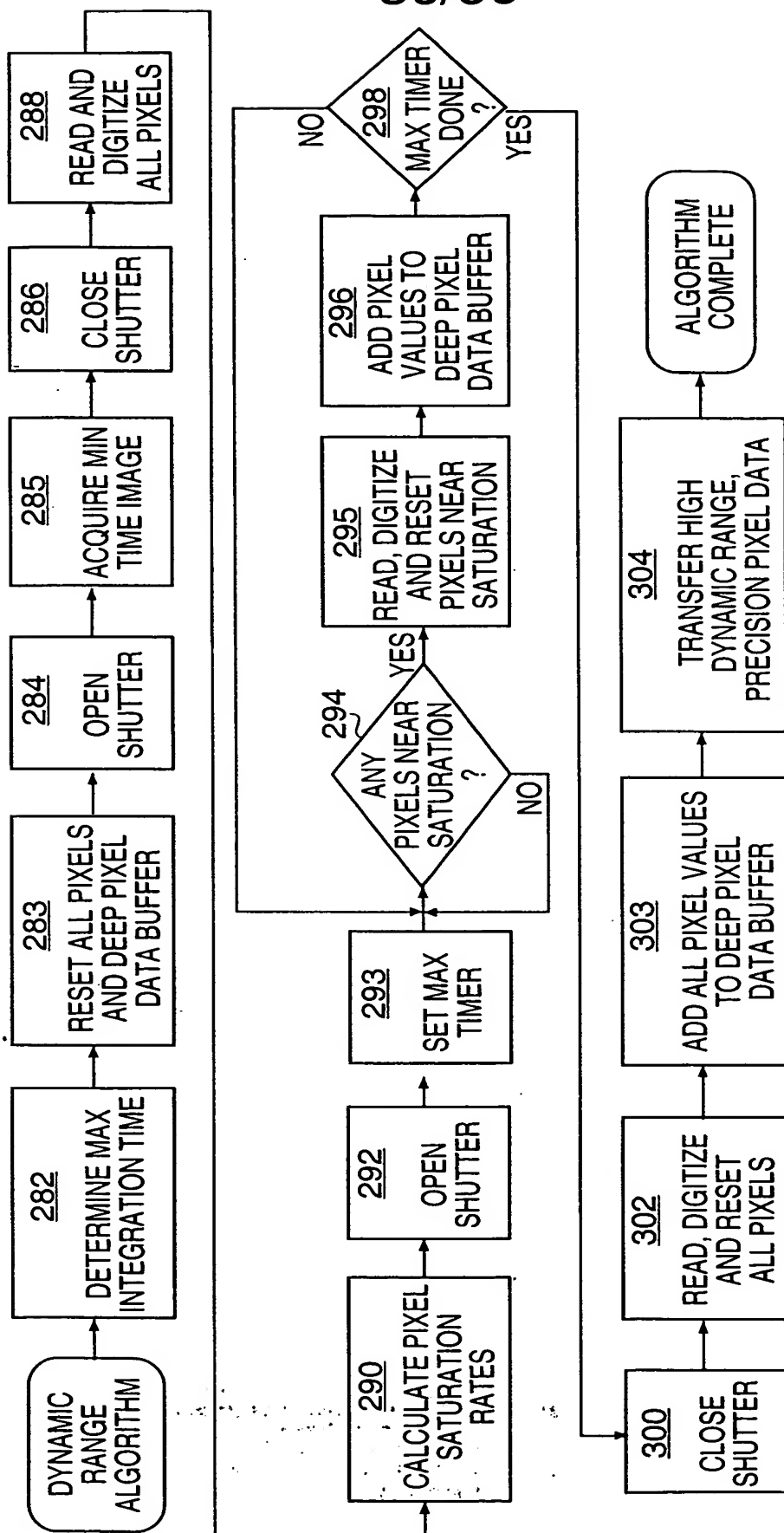


FIG. 23B2

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FIG. 24

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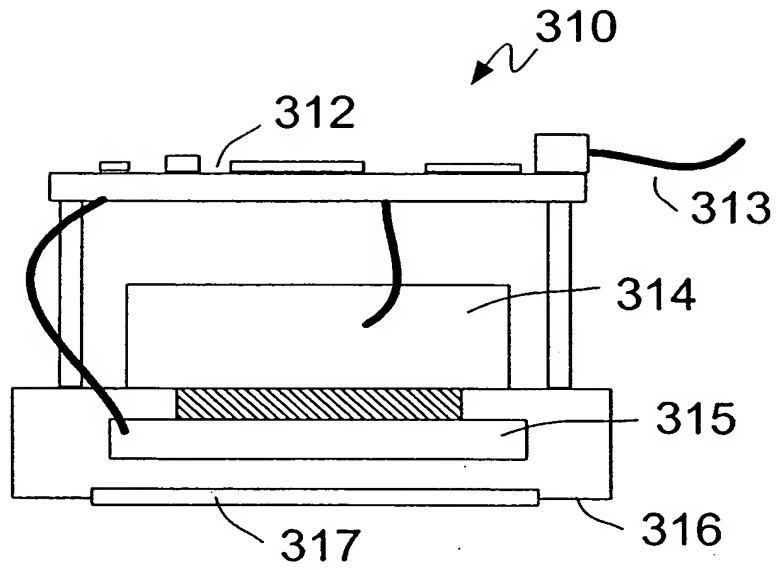


FIG. 25

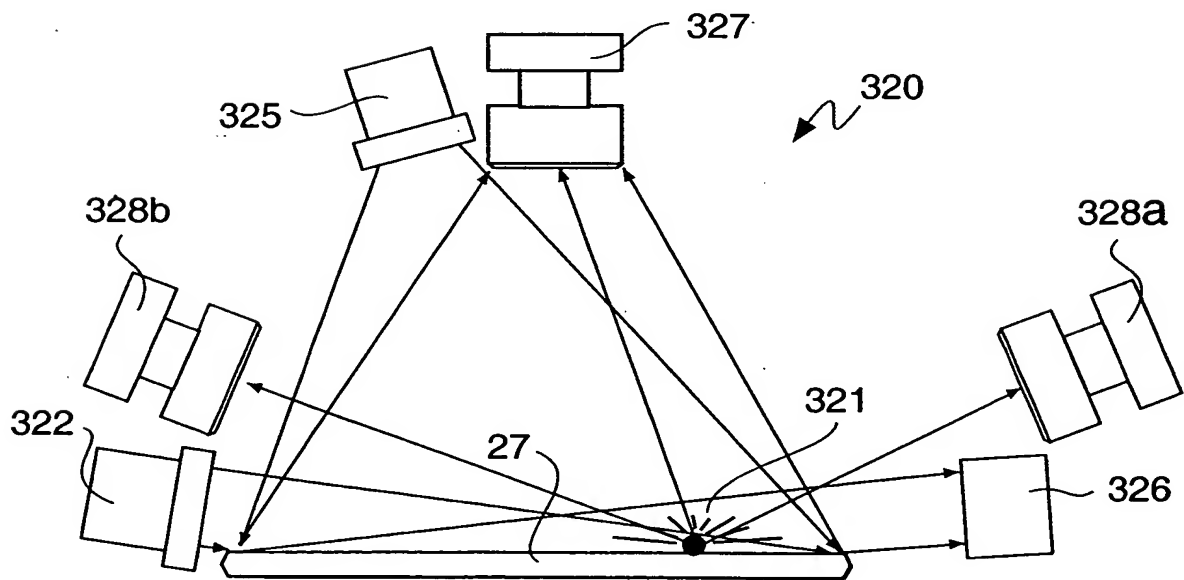


FIG. 26A

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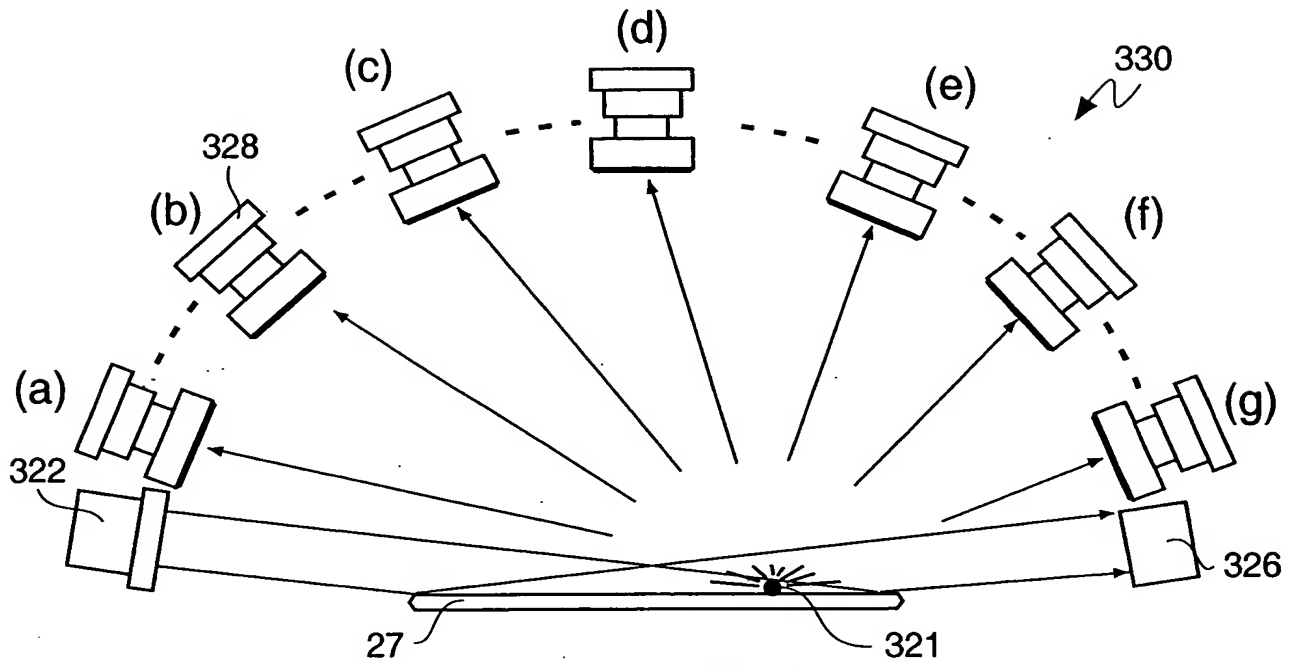


FIG. 26B

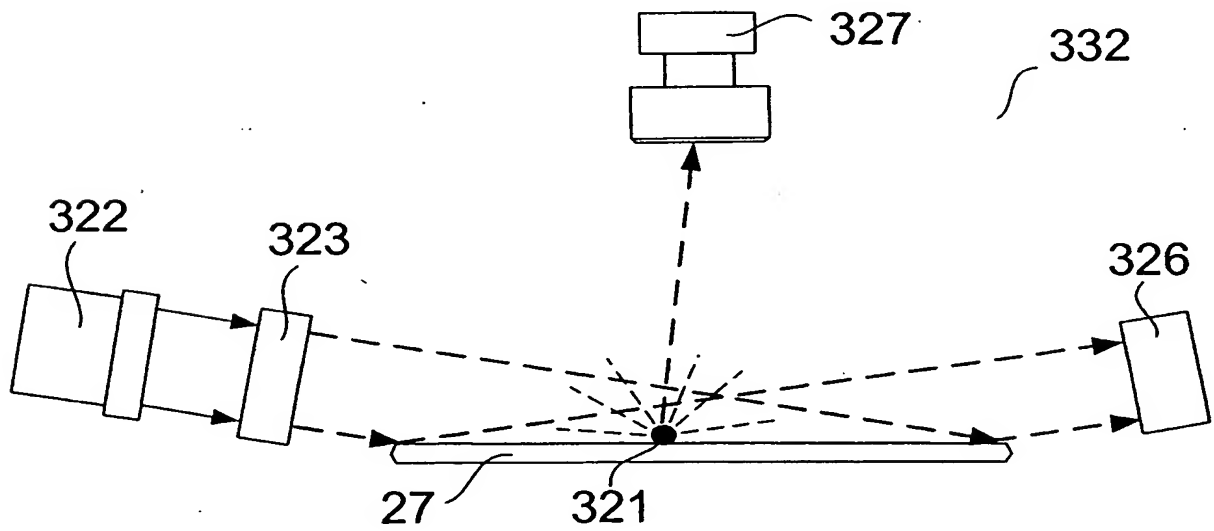


FIG. 26C

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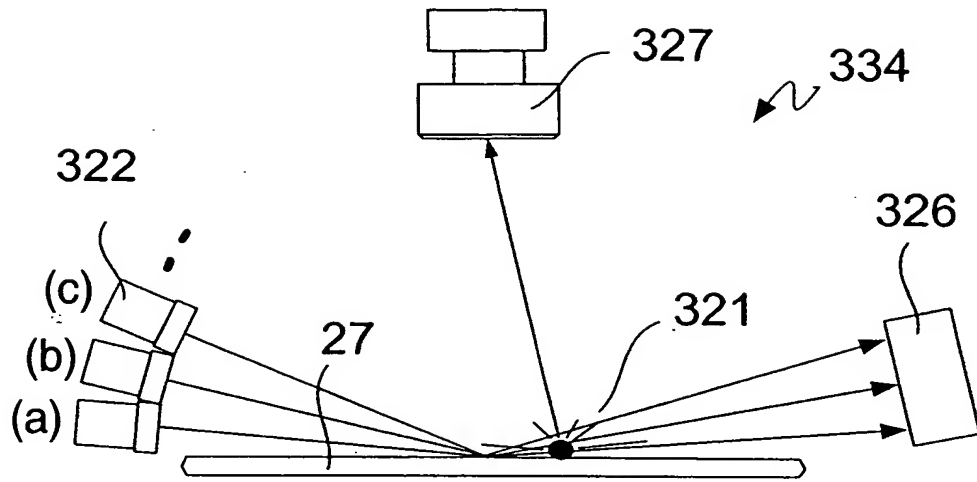


FIG. 26D

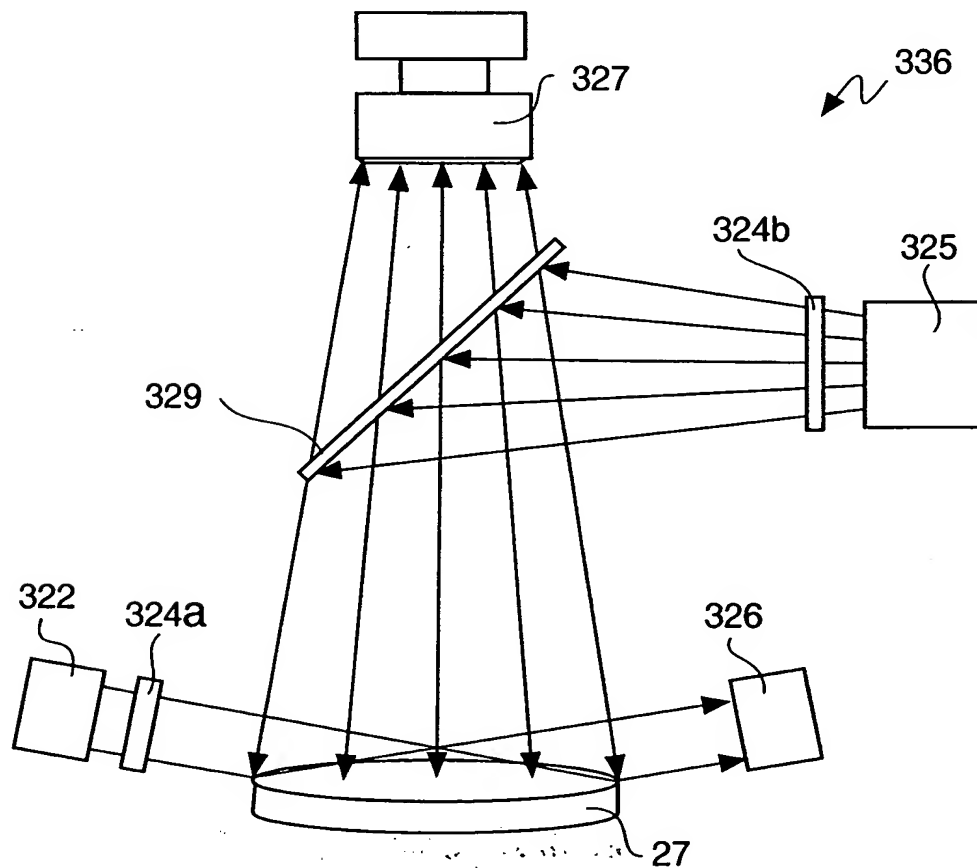


FIG. 26E

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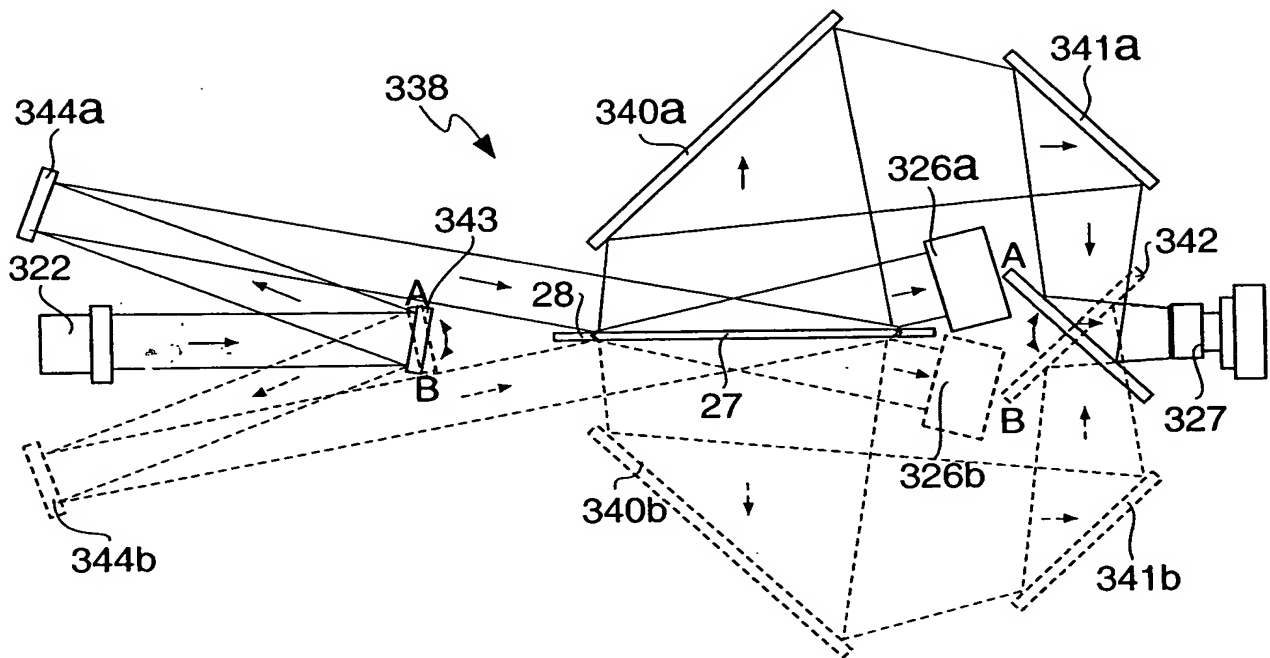


FIG. 26F

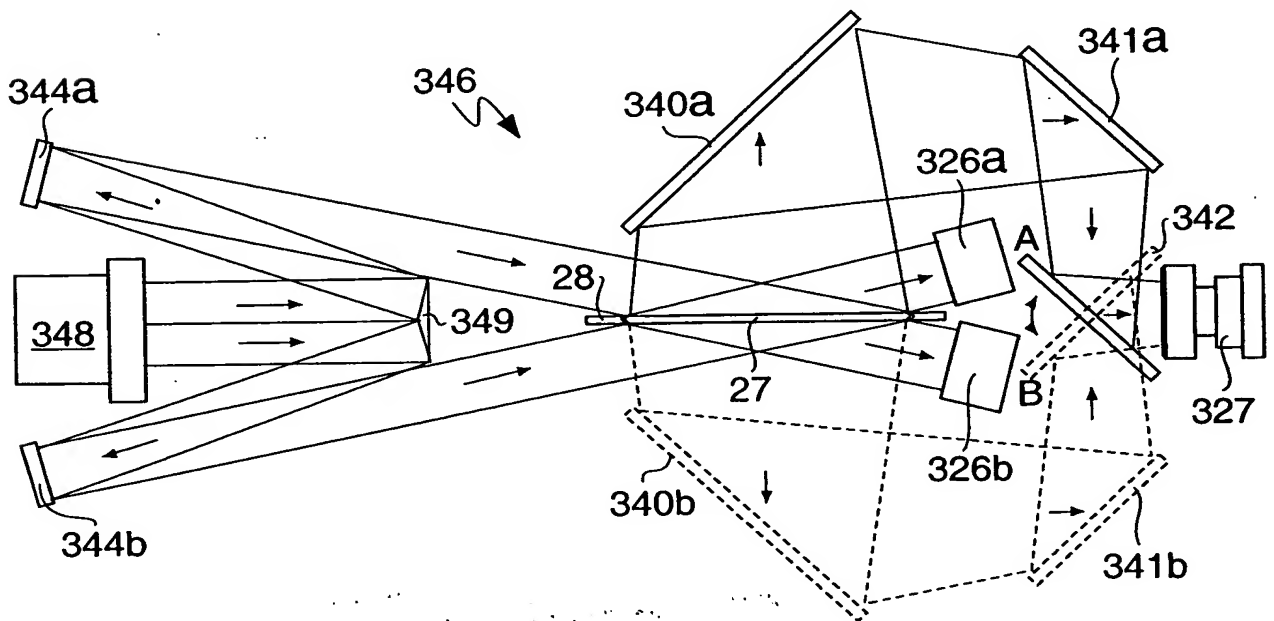


FIG. 26G

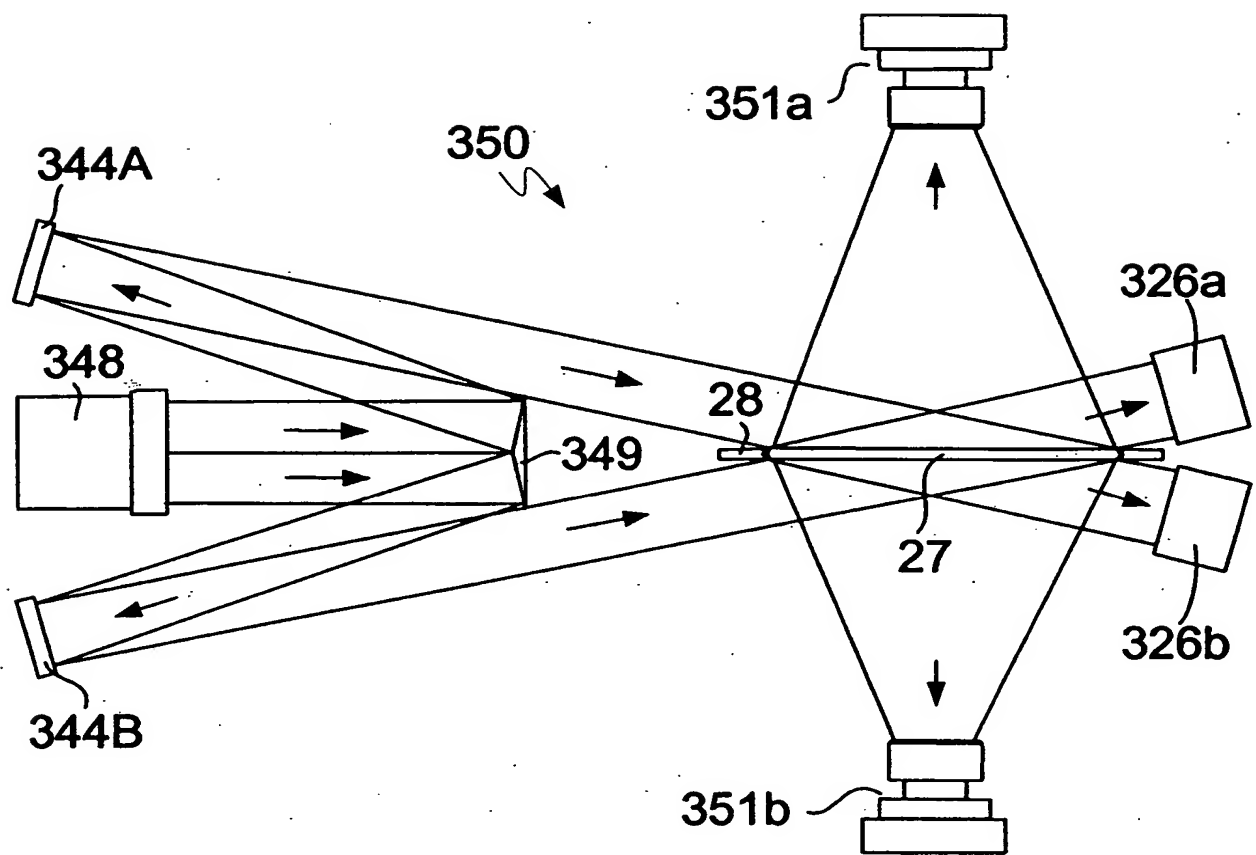


FIG. 26H

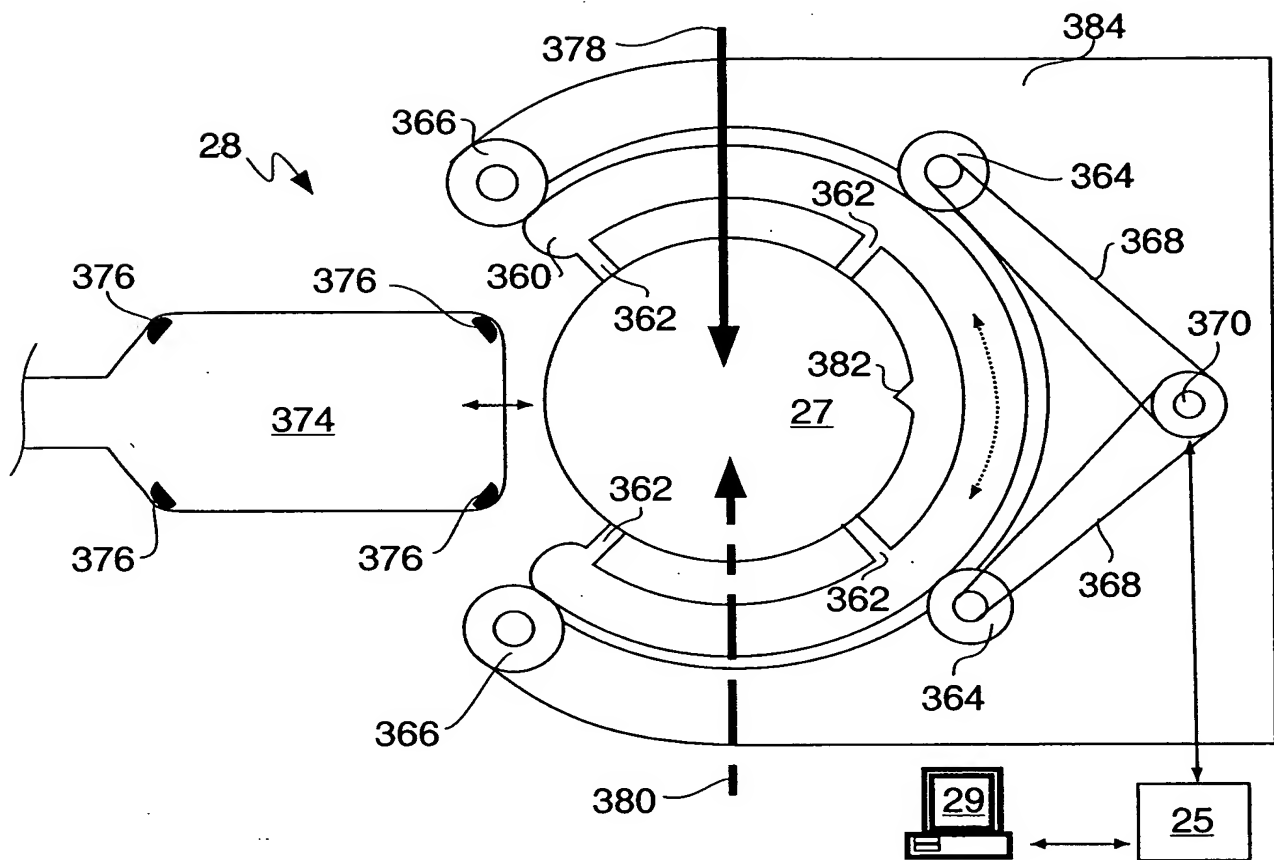


FIG. 27A

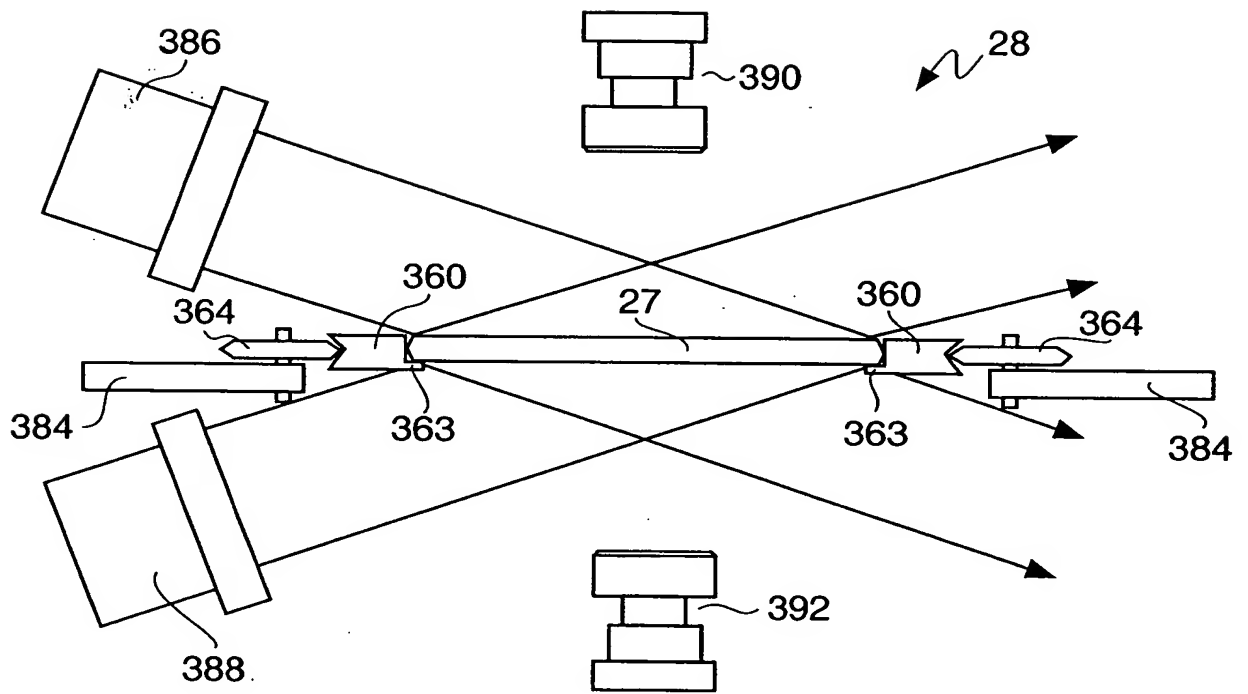


FIG. 27B

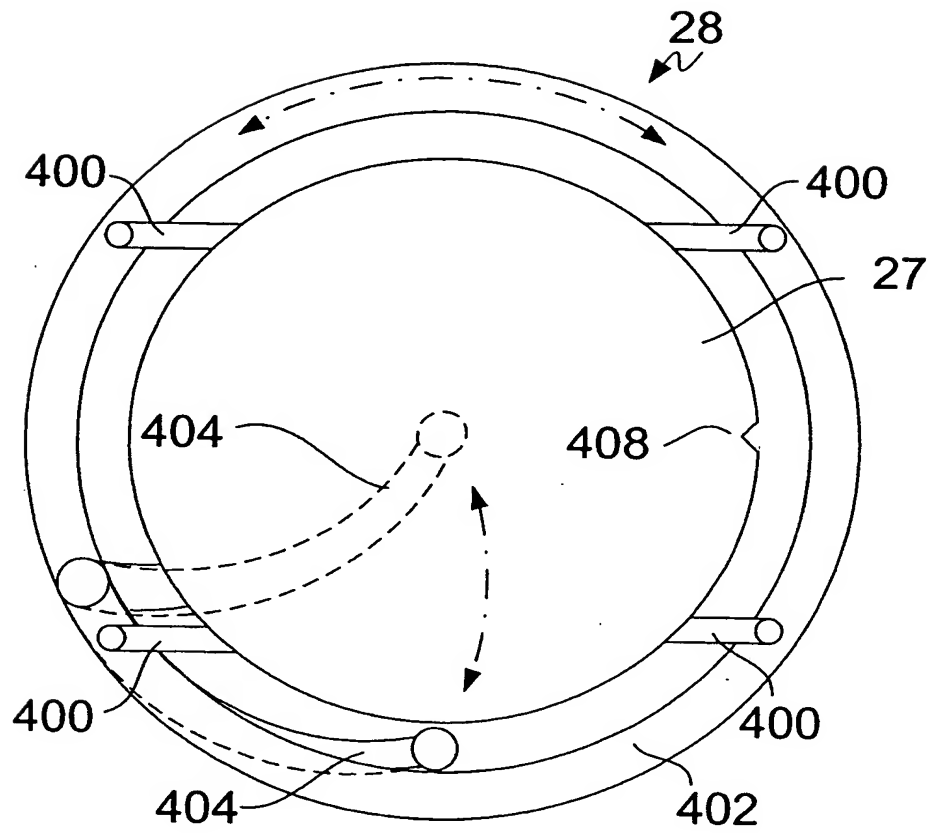
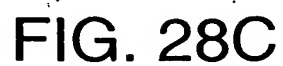
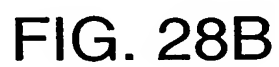


FIG. 28A



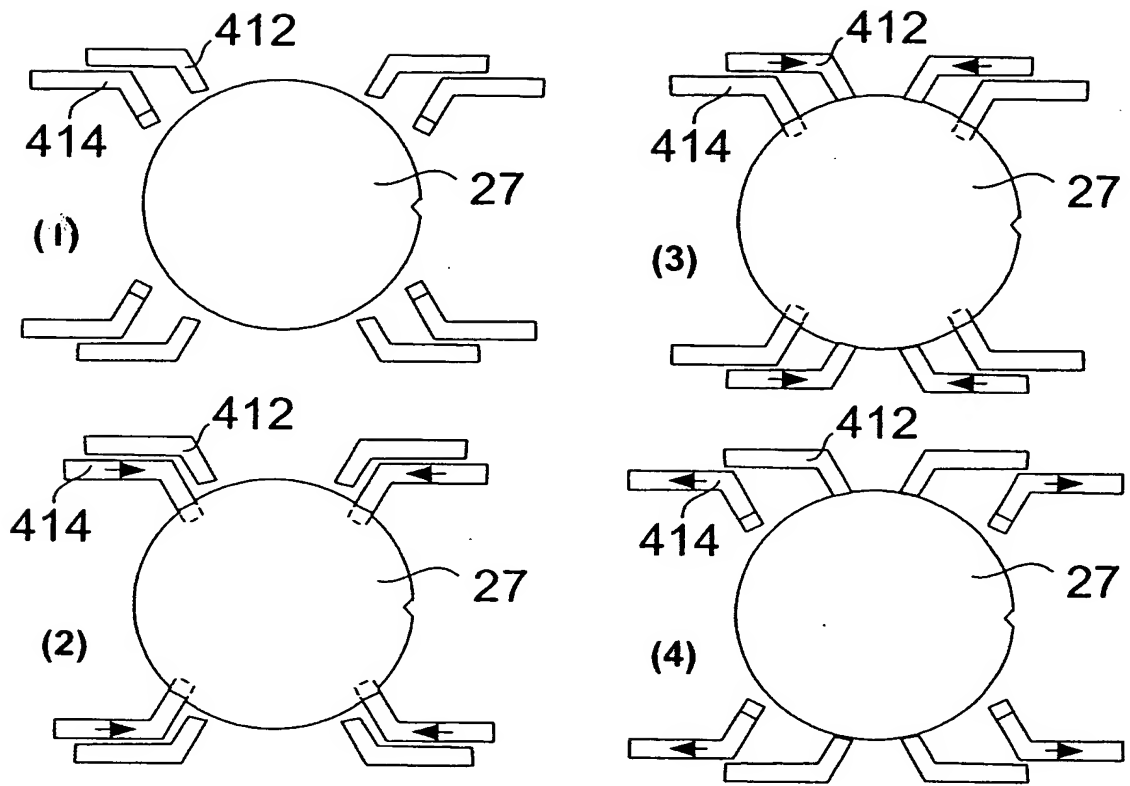


FIG. 28D

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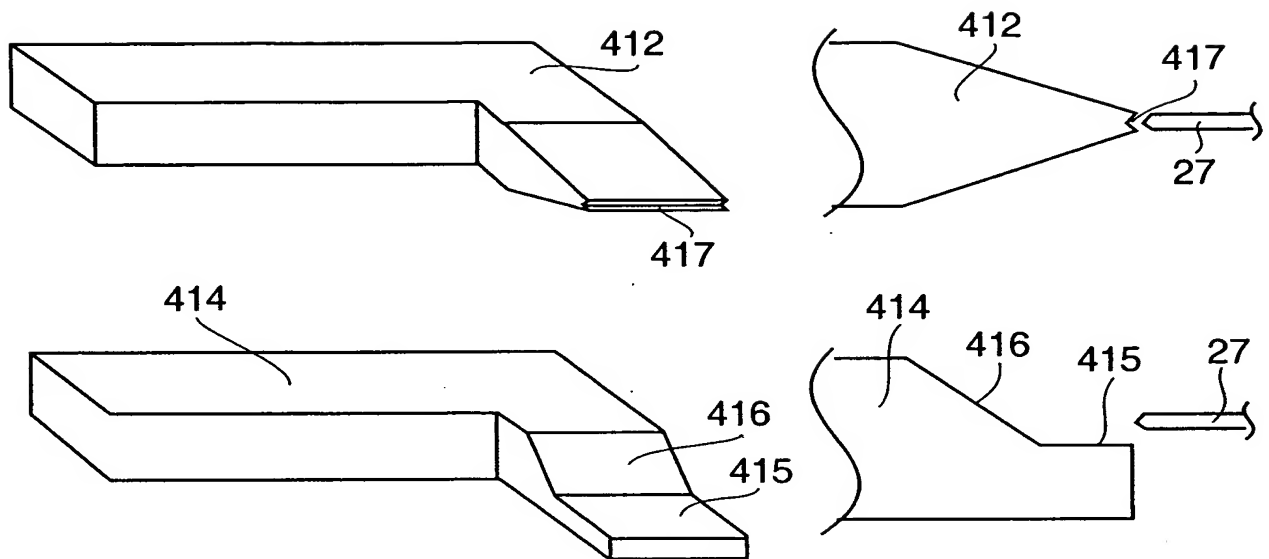


FIG. 28E

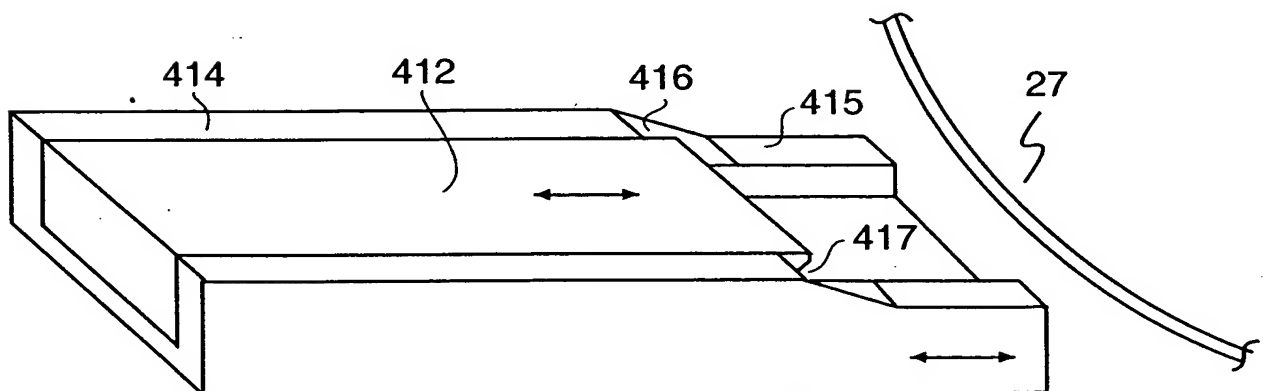


FIG. 28F

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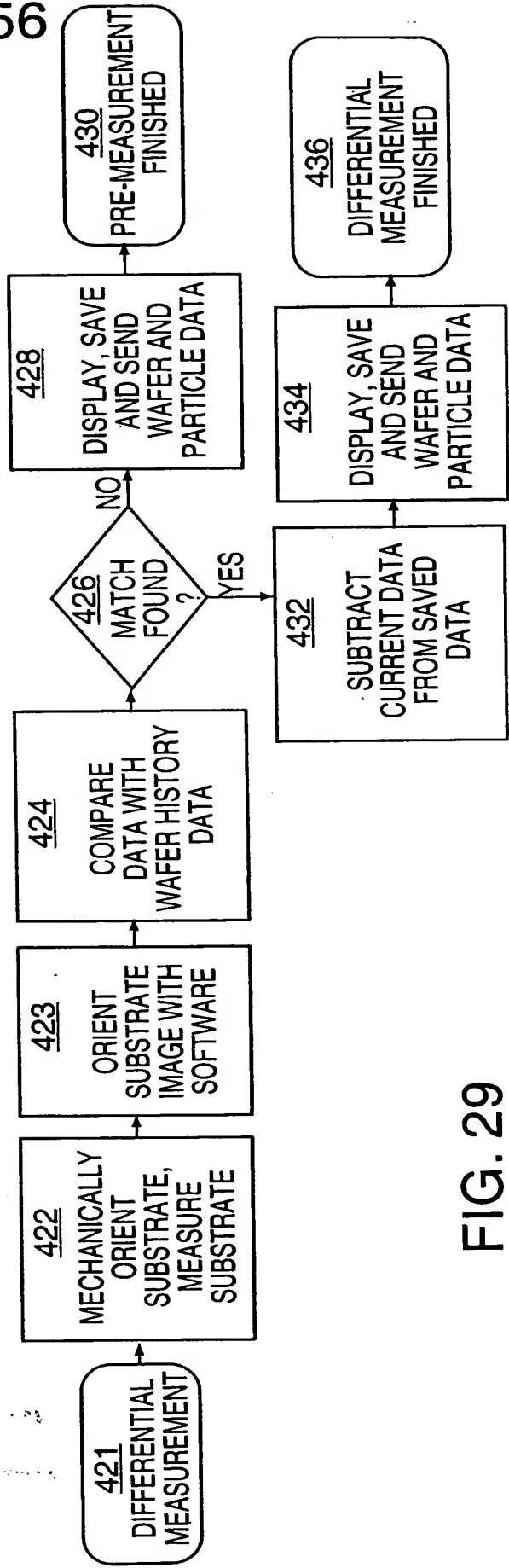


FIG. 29

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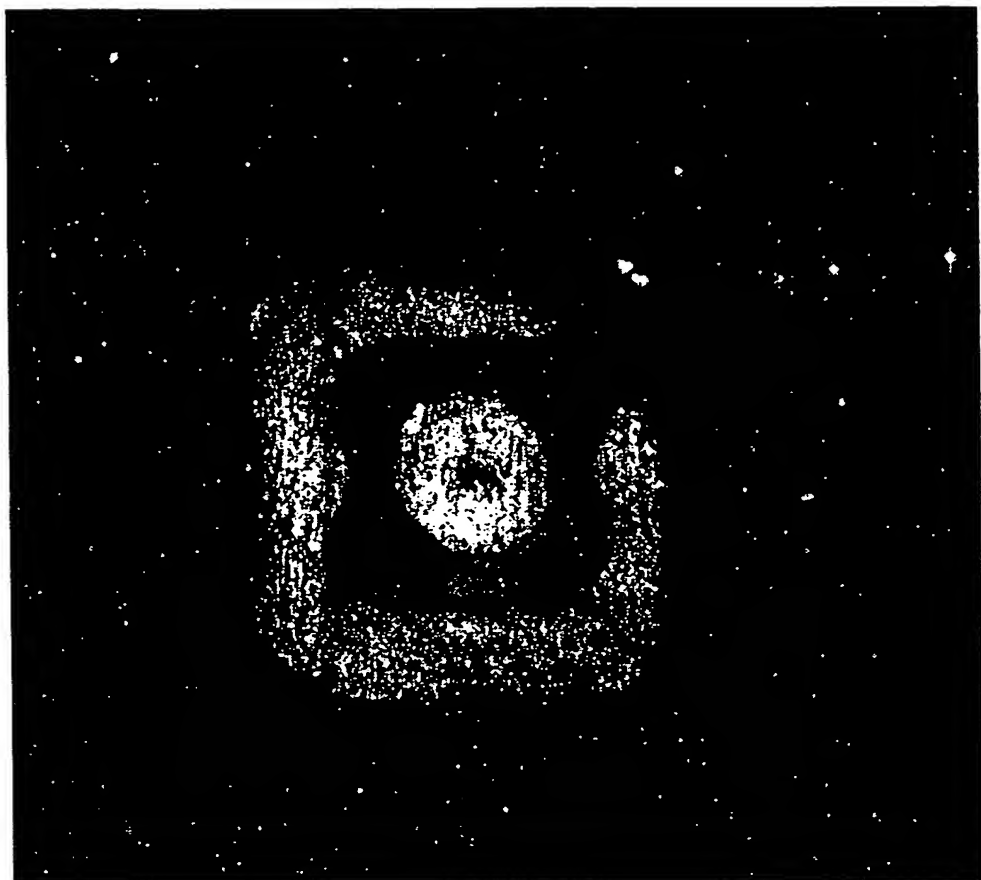
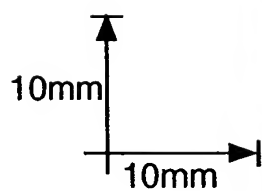


FIG. 30

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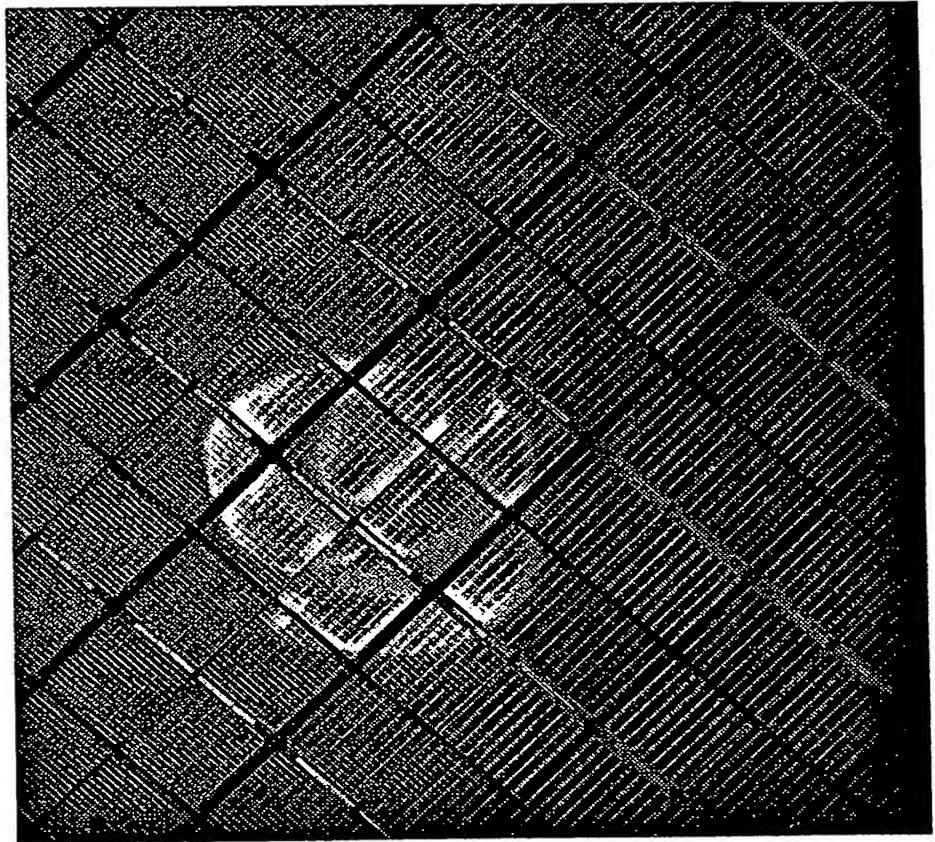
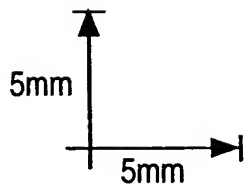


FIG. 31

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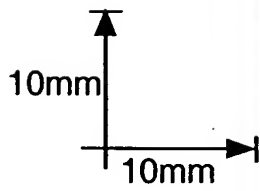


FIG. 32

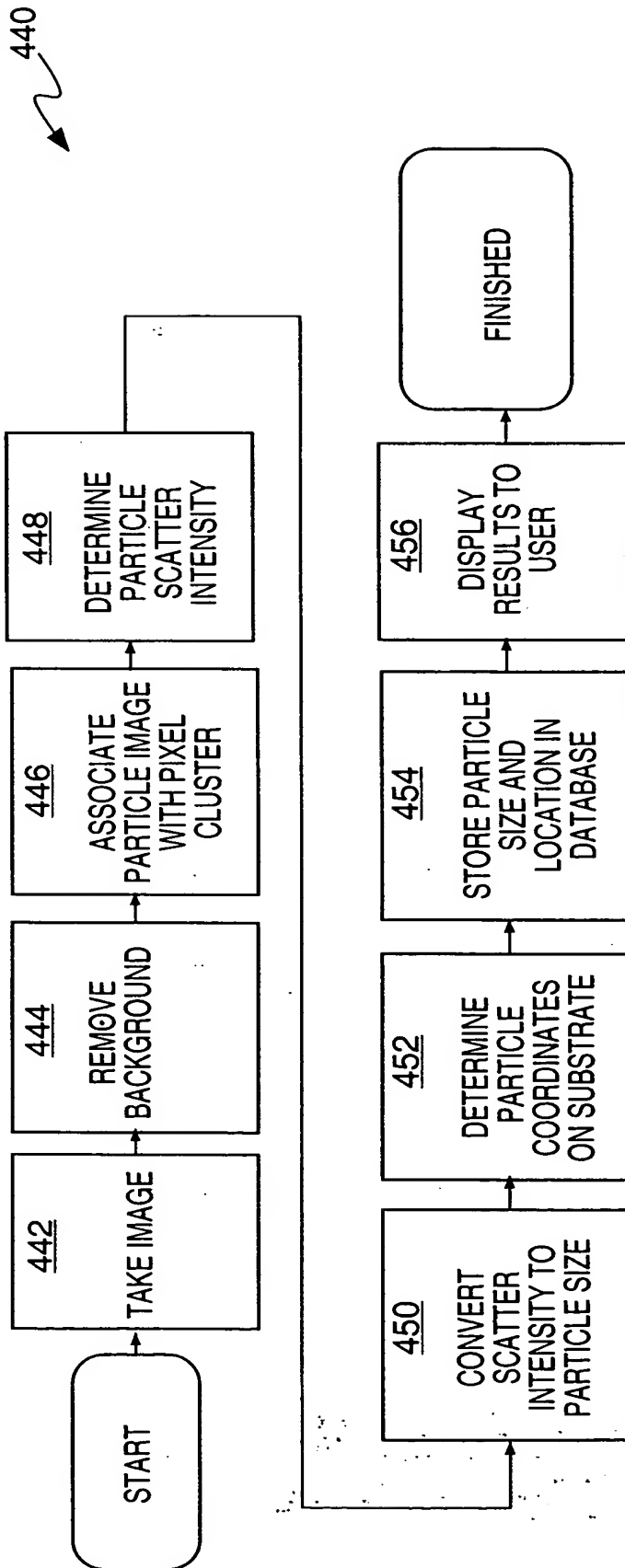


FIG. 33

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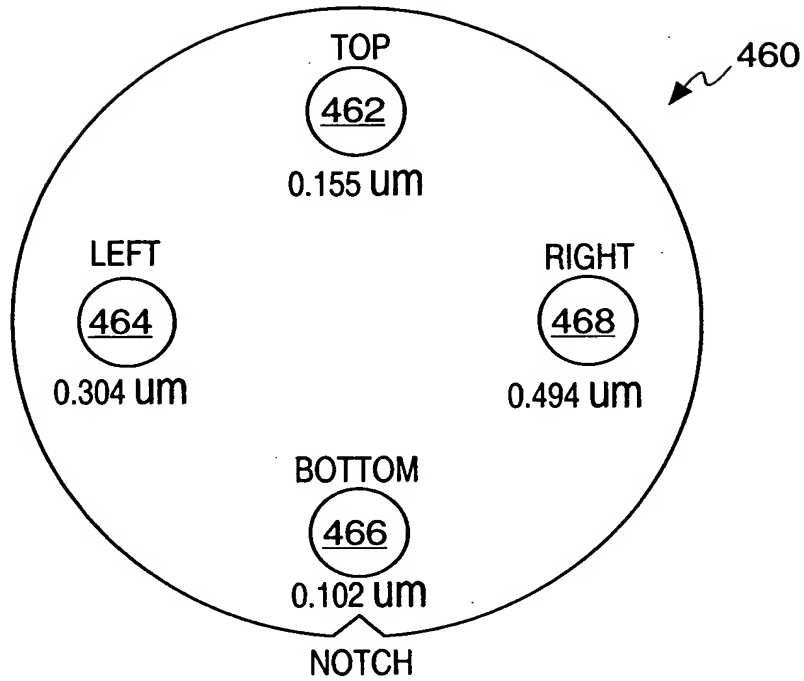


FIG. 34

WAFER
MAPPING
COORDINATES

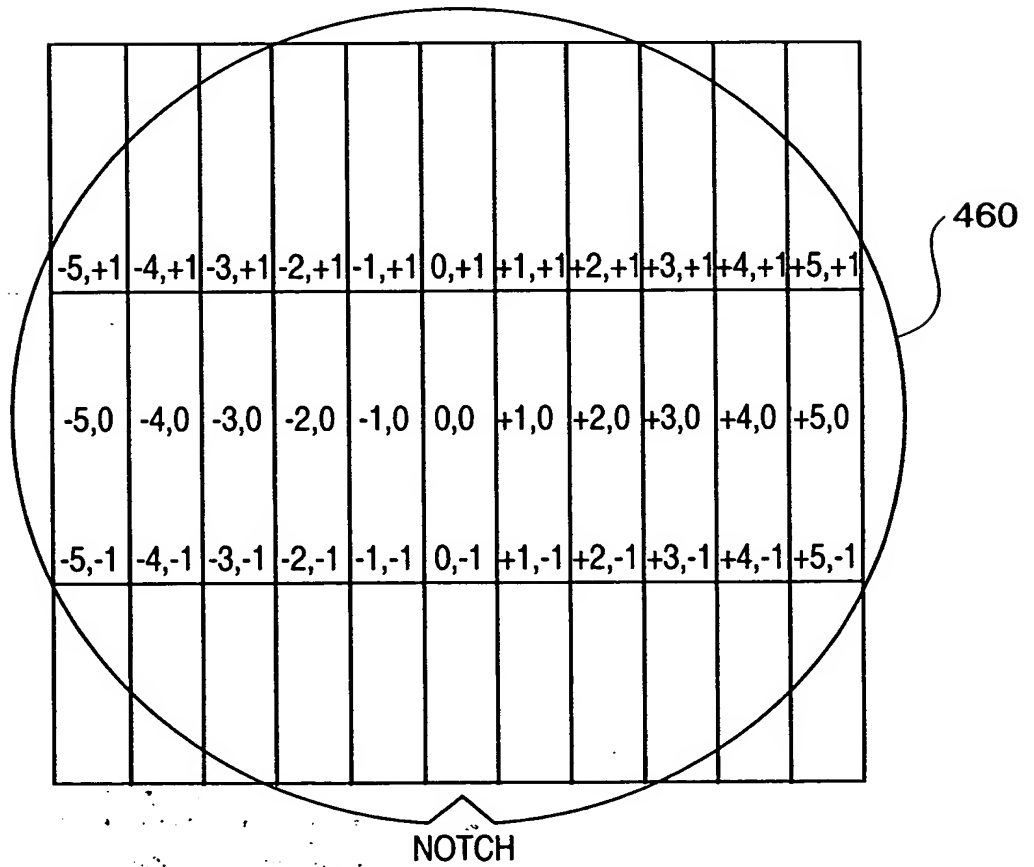
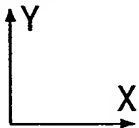


FIG. 35

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FIG. 36

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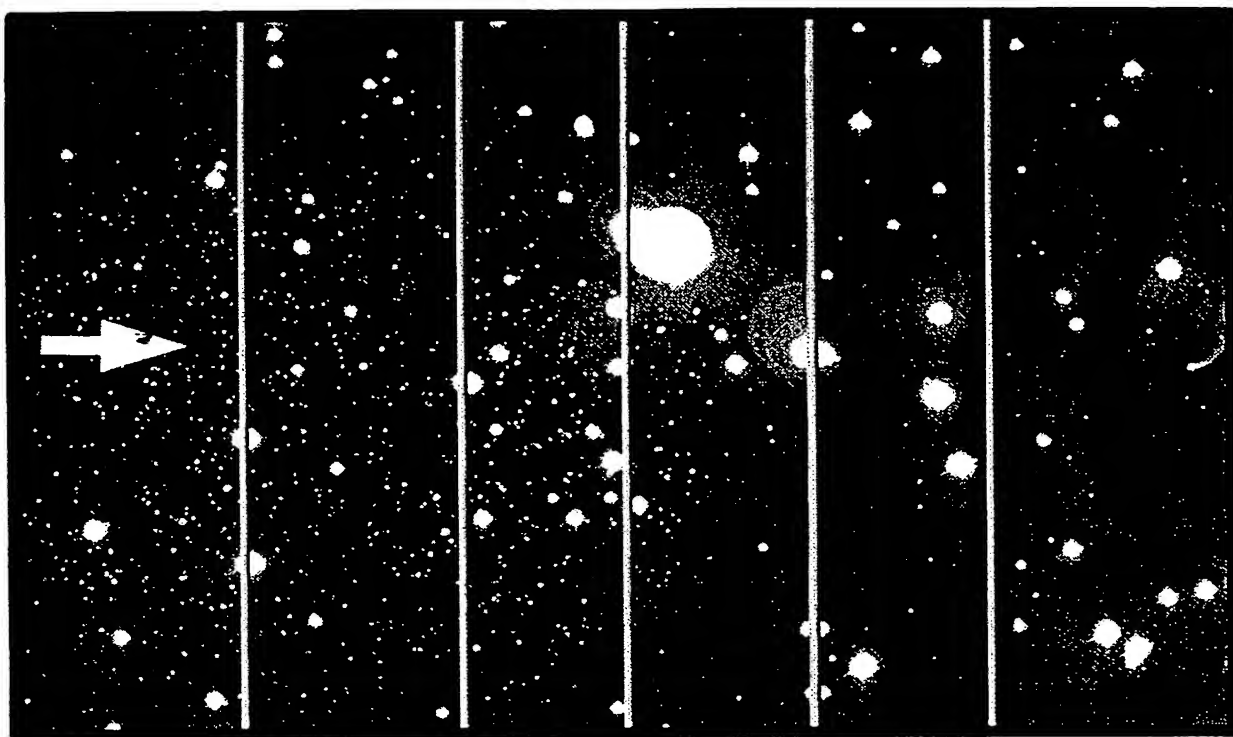


FIG. 37

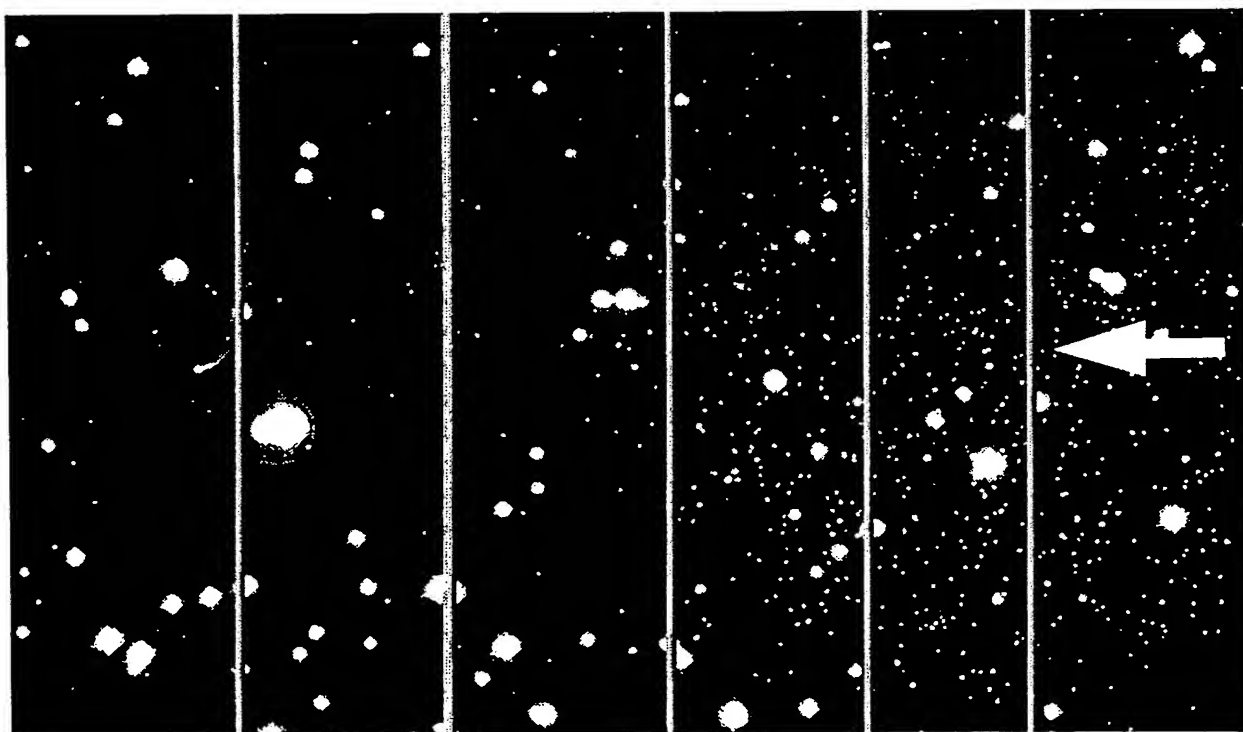


FIG. 38

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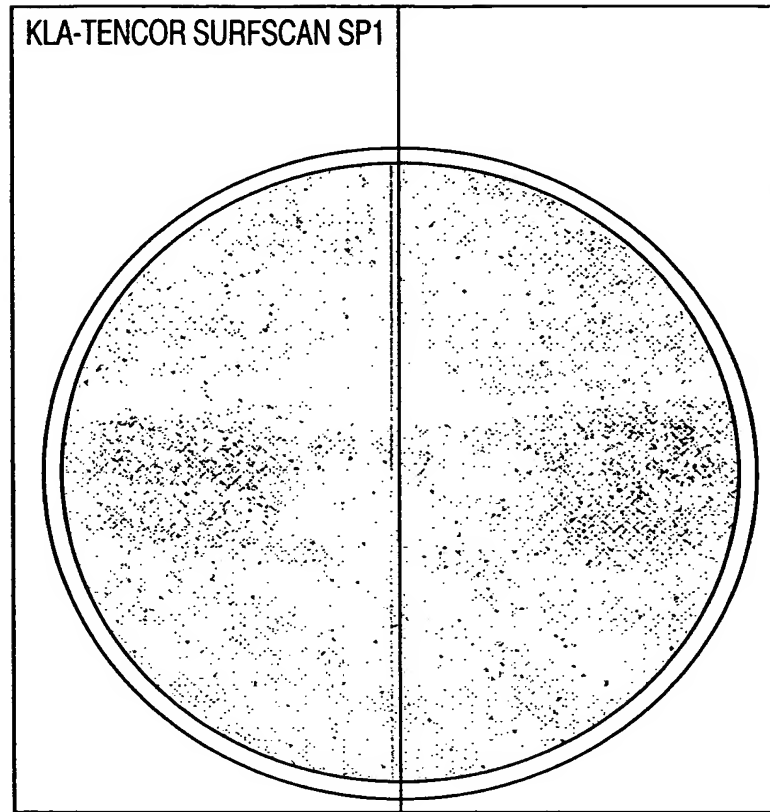


FIG. 39

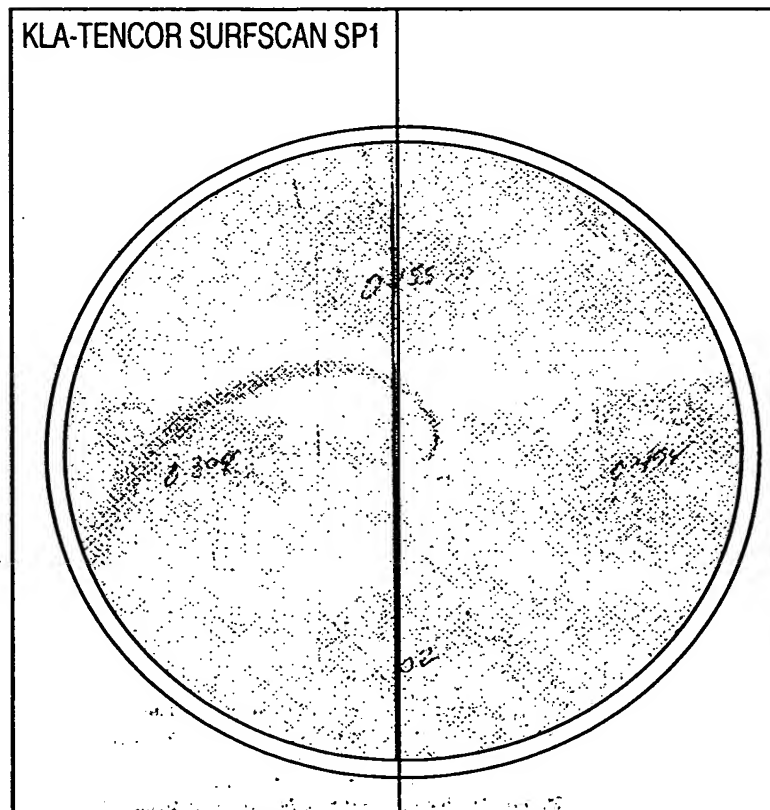


FIG. 40

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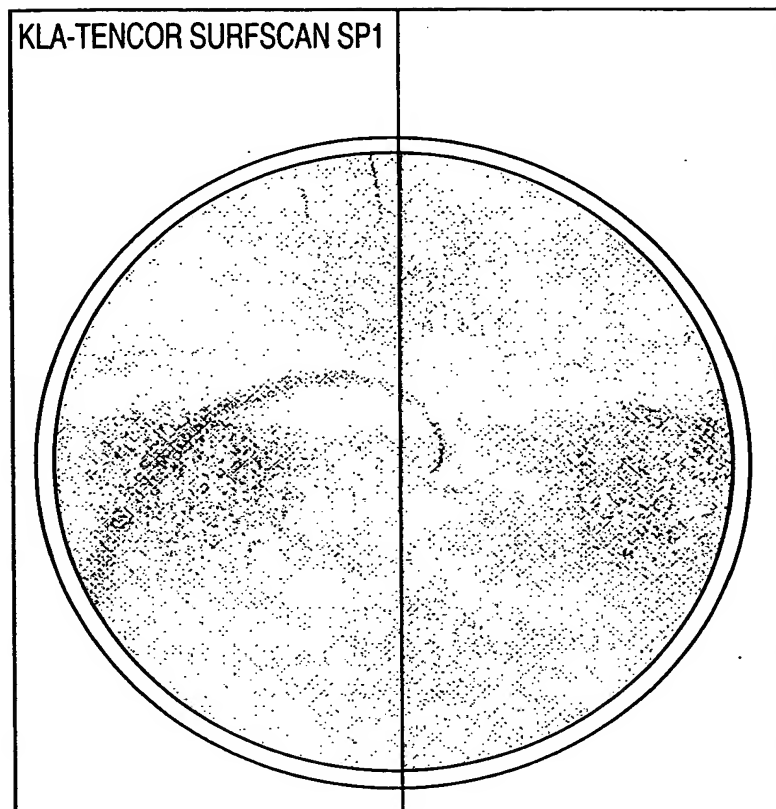
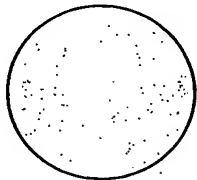
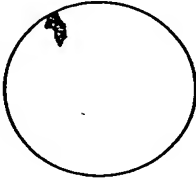


FIG. 41

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KLA-TENCOR SURFSCAN SP1

07 JUN 2002 08:34:42 WAFER ID: LOT ID: SP1402CAL SRC / DEST: R1 ? / NA INSPECTED SIDE: FRONT COMPANY NAME: AUTO COMMENT THROUGHOUT LOW: 200 MM/ 8.0 MM OBLIQUE: DW u FULL DN u OPM WIN II 5645+002/2,0000+001 C GRADE: REJECTED			
CHANNEL ID	DCD	DIC	
SUM OF ALL DETECTOR	25409	NA	
LPD/PPD COUNT:	24482	NA	
OBJECT DENSITY	54,479	NA	
<input type="checkbox"/> AREA COUNT	367	NA	
TOTAL AREA (mm ²)	43,744	NA	
HAZE:	DWD	DND	PIC
REGION %	98.23	99.25	NA
AVG (PPM)	0.021	0.003	NA
MED (PPM)	0.021	0.000	NA
PEAK (PPM)	7.814	7.028	NA
S4 DEV (PPM)	0.003	0.002	NA
LPQ	DCQ	(PMD.S4)	LPD
<input type="checkbox"/>	0.060 - 0.100	19911	NA
<input type="checkbox"/>	0.100 - 0.200	4717	NA
<input type="checkbox"/>	0.002 - 0.300	1184	NA
<input type="checkbox"/>	0.300 - 0.400	271	NA
<input type="checkbox"/>	0.400 - 0.000	1339	NA
MIN.			0.133
STD. DEV.			0,216
DWO CHANNEL			
BURN OF AS DETECTOR	24543		
LPD COUNT	21633		
DEFECT DENSITY	78,823		
<input type="checkbox"/> AREA COUNT	2353		
TOTAL (mm ²)	43,744		
LPD DIW (mmLSB)			
<input type="checkbox"/>	0.060 - 0.100	16814	
			

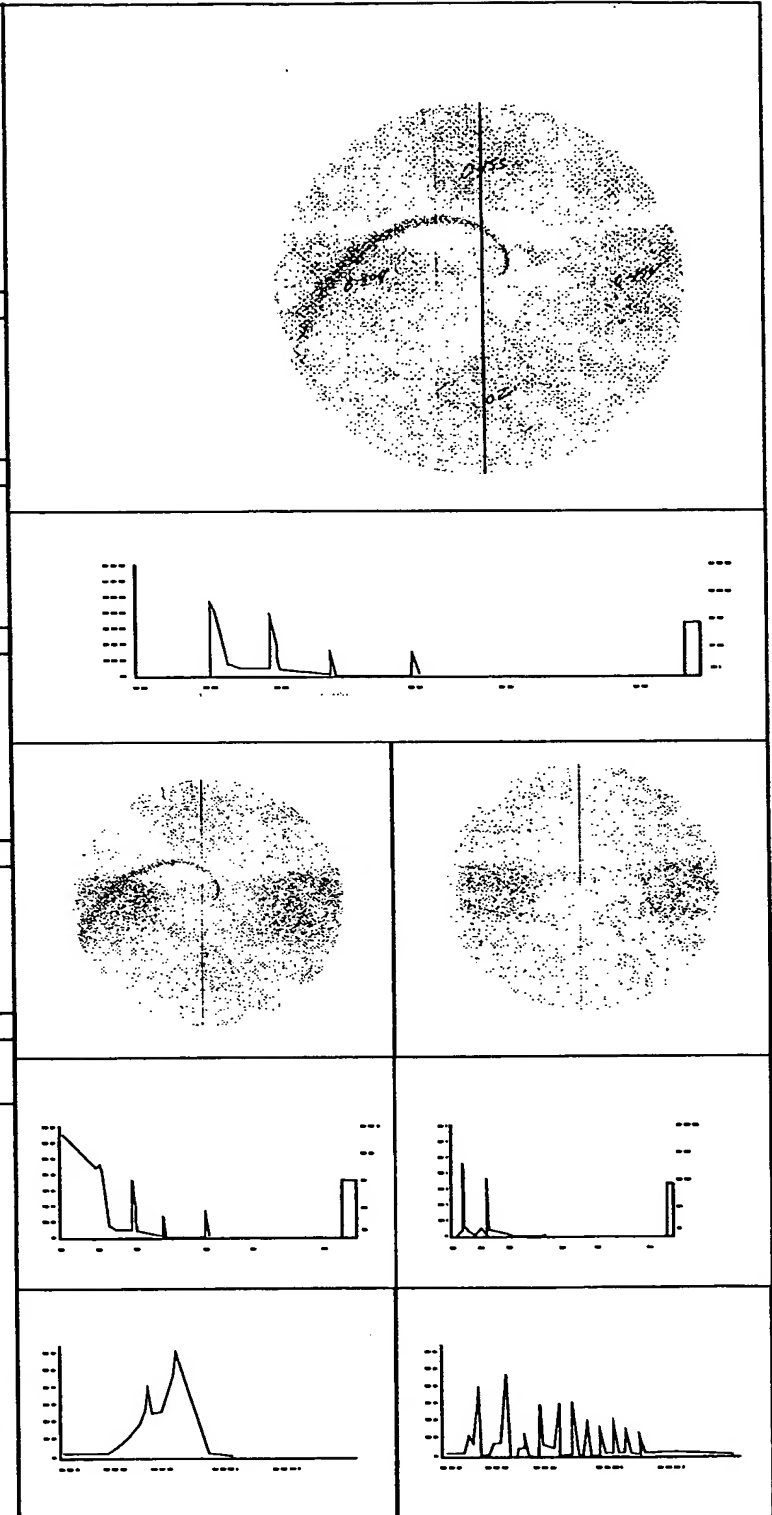


FIG. 42

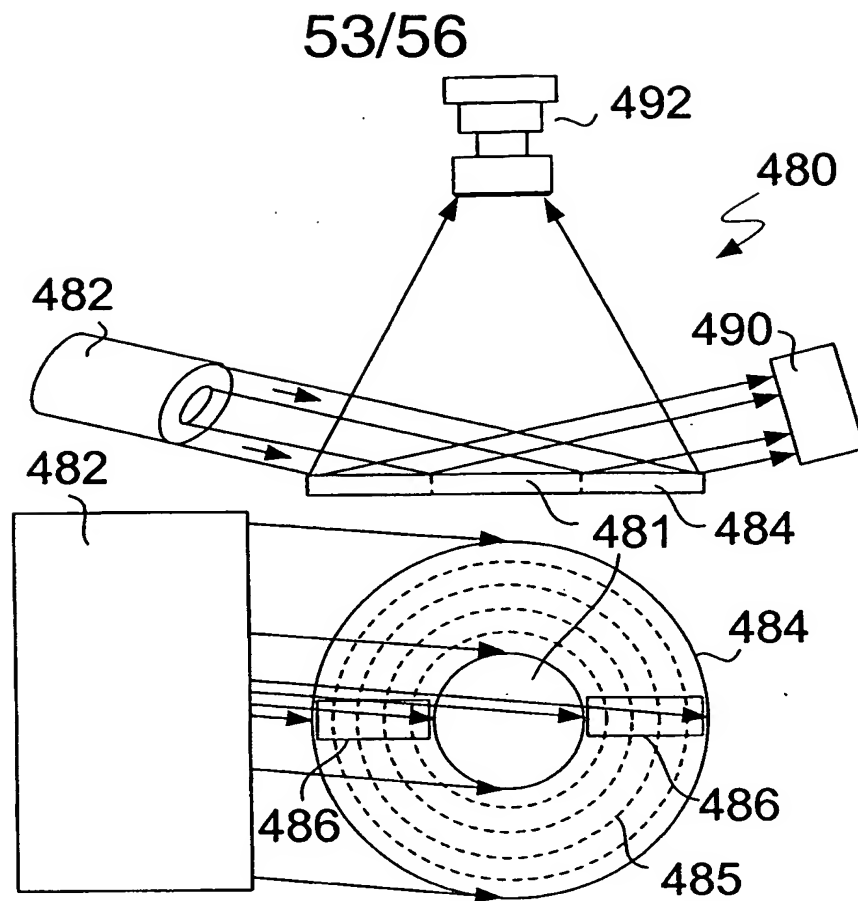


FIG. 43

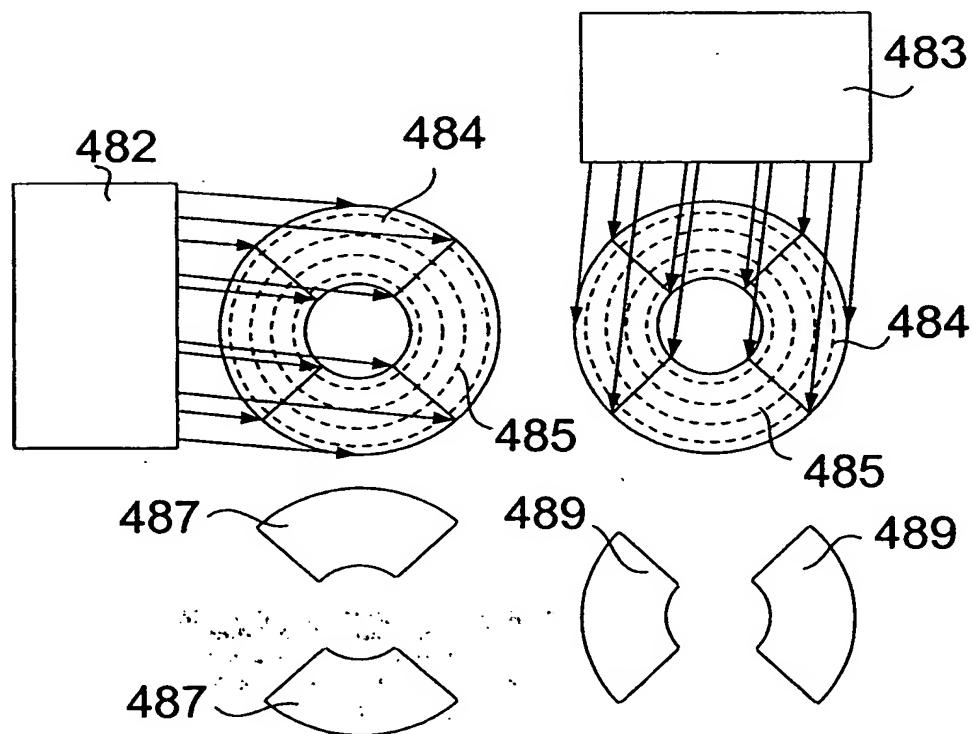


FIG. 44

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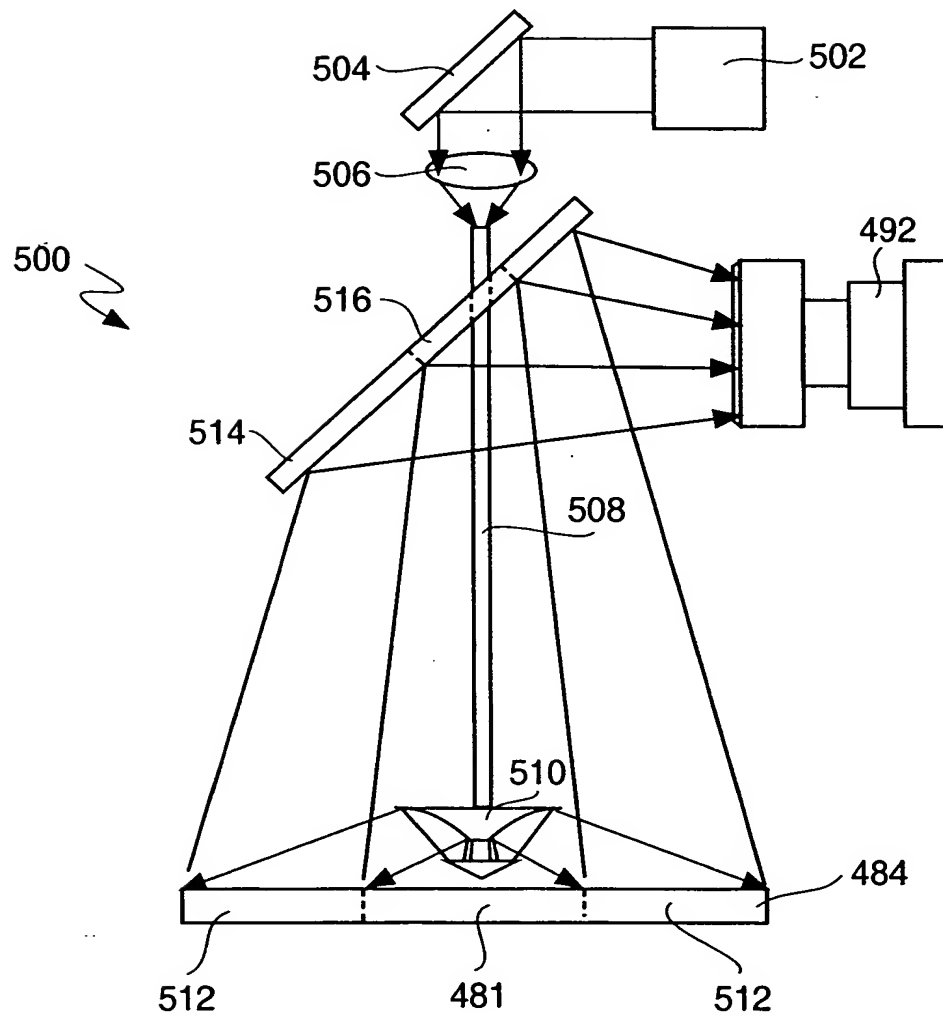


FIG. 45

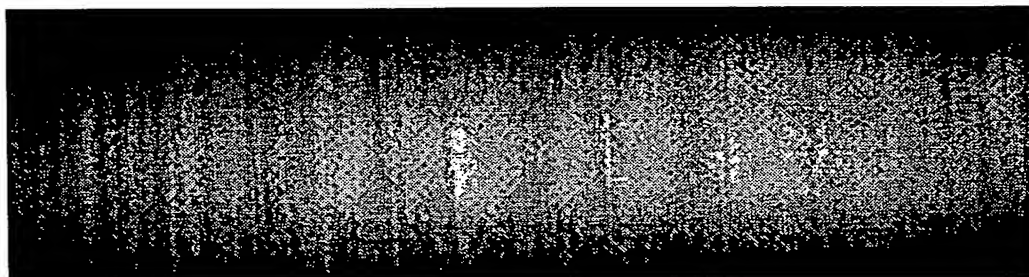
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520



1 mm

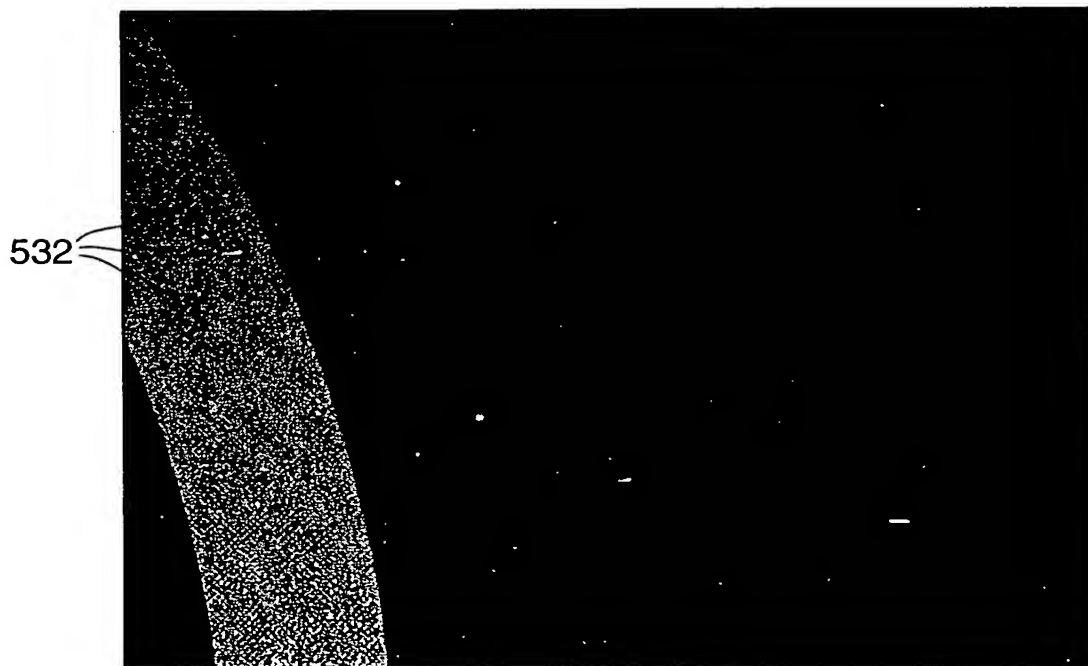
522



1 mm

FIG. 46

530



532

534

1 mm

FIG. 47

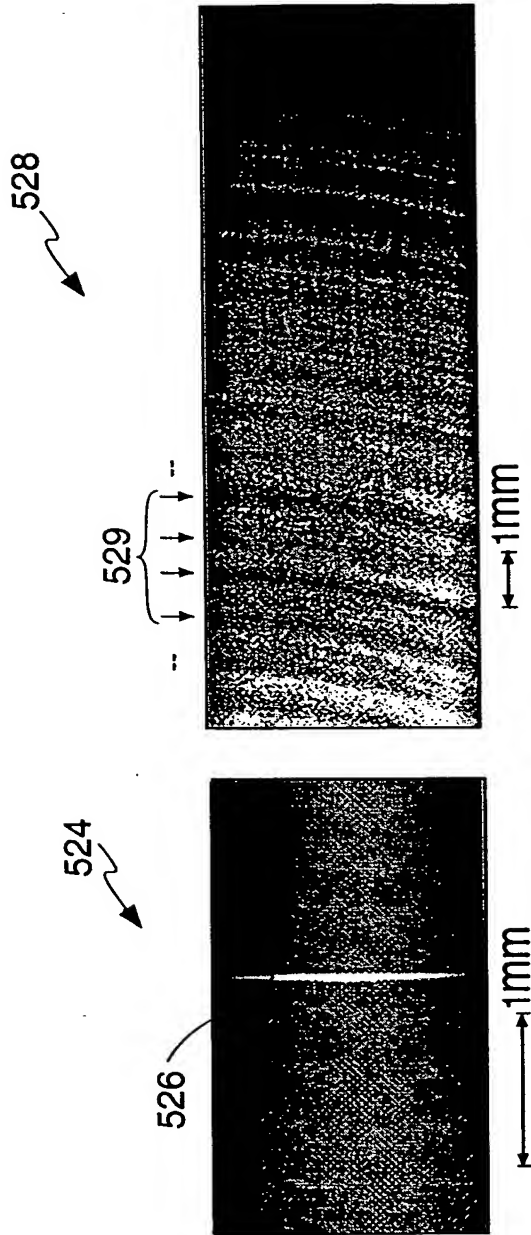


FIG. 48

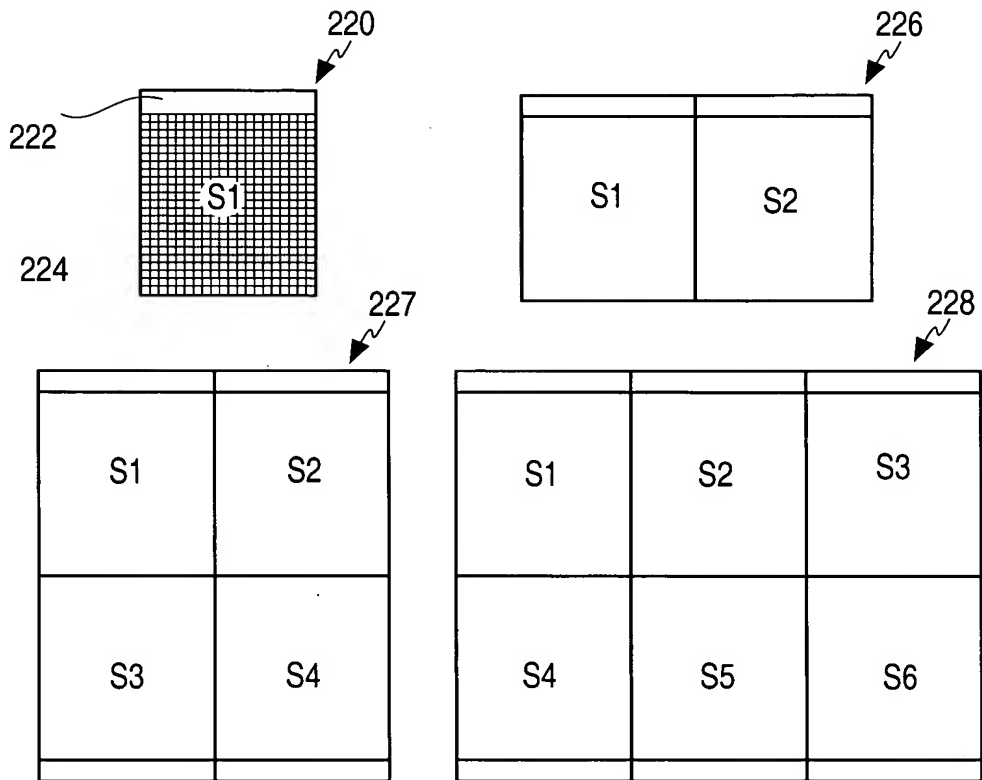


FIG. 23

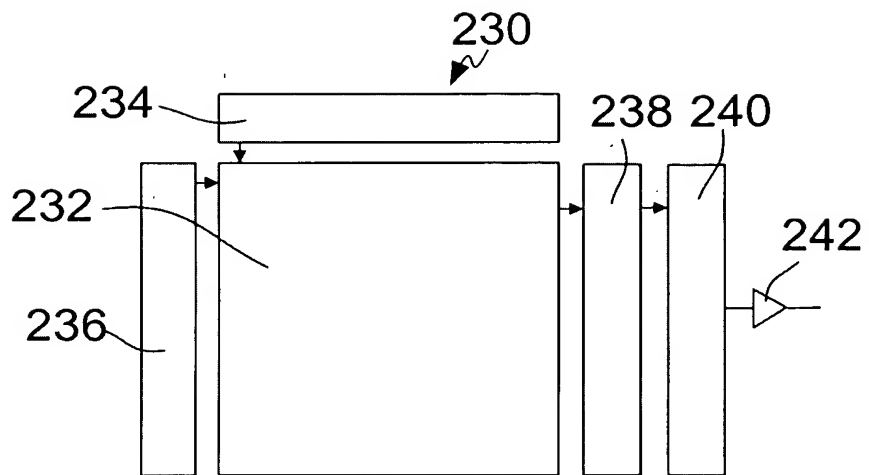


FIG. 23A1

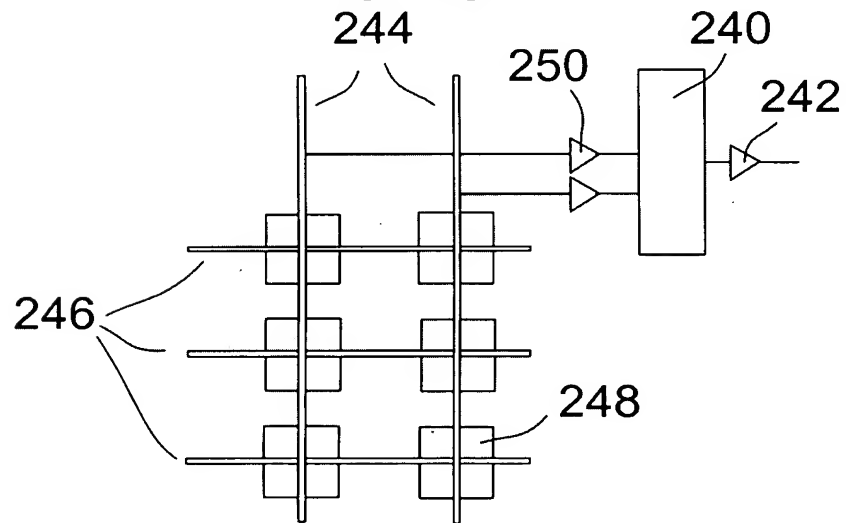


FIG. 23A2